Water & Natural Resources Committee

Wednesday January 11, 2006
1:15 p.m.—3:15 p.m.
Reed Hall

Meeting Packet

Allan G. Bense
Speaker

Donna Clarke
Chair

The Florida House of Representatives

Water & Natural Resources Committee

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Agenda

Water & Natural Resources Committee
Wednesday January 11, 2006
Reed Hall

I. Call to Order

II. Roll Call

III. Workshop on the following bill:
HB 229 Use of Land for the Exploration, Production, and Storage of Petroleum

IV. Presentations by:
U.S. Minerals Management Service—Johnnie Burton
Department of Environmental Protection (DEP)—Mike Sole

V. Adjournment

1101 the Capitol, 402 South Monroe Street, Tallahassee, Florida 32399-1300 (850) 488-1564

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 229 Use of Land for the Exploration, Production, and Storage of Petroleum and Natural Gas
SPONSOR(S): Clarke
TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) Water & Natural Resources Committee		Lotspeich RAL	Lotspeich RAL
2) Environmental Regulation Committee			
3) Agriculture & Environment Appropriations Committee			
4) State Resources Council			
5)			

SUMMARY ANALYSIS

The bill prohibits the use of state-owned submerged lands for any activities associated with the exploration for or the production of oil or natural gas.

The bill also addresses concerns relating to potential environmental impacts that may be caused by hurricane winds and storm surge to bulk fuel storage terminal facilities located in coastal areas. The bill requires all dike fields around such facilities to be designed and maintained to withstand the winds and storm surge associated with a hurricane.

The bill will have no fiscal impact on the state or local governments. The bill will cause oil companies to incur costs associated with upgrading existing dike fields to comply with the requirements of the bill. The total costs to the oil companies are indeterminate at this time.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

The bill does not appear to implicate any of the House Principles.

B. EFFECT OF PROPOSED CHANGES:

Background

Offshore Drilling for Oil and Natural Gas

The Outer Continental Shelf

The Outer Continental Shelf (OCS) consists of the submerged lands, subsoil, and seabed, lying between the seaward extent of the States' jurisdiction and the seaward extent of Federal jurisdiction. The continental shelf is the gently sloping undersea plain between a continent and the deep ocean. The United States OCS has been divided into four leasing regions. They are the Gulf of Mexico OCS Region, the Atlantic OCS Region, the Pacific OCS Region, and the Alaska OCS Region. In 1953, Congress designated the Secretary of the Department of Interior to administer mineral exploration and development of the entire OCS through the Outer Continental Shelf Lands Act (OCSLA). The OCSLA was amended in 1978 directing the secretary to:[1]

- conserve the Nation's natural resources;
- develop natural gas and oil reserves in an orderly and timely manner;
- meet the energy needs of the country;
- protect the human, marine, and coastal environments; and
- receive a fair and equitable return on the resources of the OCS.

State jurisdiction over the OCS is defined as follows:

- Texas and the Gulf coast of Florida are extended 3 marine leagues (approximately 9 nautical miles) seaward from the shoreline.
- Louisiana is extended 3 imperial nautical miles (imperial nautical mile = 6080.2 feet) seaward from the shoreline.
- All other States' seaward limits are extended 3 nautical miles (approximately 3.3 statute miles) seaward from the shoreline.

Federal jurisdiction over the OCS is defined under accepted principles of international law. The seaward limit is defined as the farthest of 200 nautical miles seaward of the shoreline or, if the continental shelf can be shown to exceed 200 nautical miles, a distance not greater than a line 100 nautical miles from the 2,500-meter isobath or a line 350 nautical miles from the shoreline.[2]

The Outer Continental Shelf is a significant source of oil and gas for the nation's energy supply. The OCS supplies more than 25 percent of the country's natural gas production and more than 30 percent of total domestic oil production. The offshore areas of the United States contain the majority of future oil

[1] http://www.gomr.mms.gov/homepg/whoismms/whatsocs.html
[2] http://www.gomr.mms.gov/homepg/whoismms/whatsocs.html

and gas resources. It is estimated that 60 percent of the oil and 59 percent of the gas yet to be discovered in the United States are located on the OCS.[3]

The OCS Lands Act requires the Department of Interior (DOI) to prepare a 5-year program that specifies the size, timing and location of areas to be assessed for Federal offshore natural gas and oil leasing. It is the role of DOI to ensure that the U.S. government receives fair market value for acreage made available for leasing and that any oil and gas activities conserve resources, operate safely, and take maximum steps to protect the environment. OCS oil and gas lease sales are held on an area-wide basis with annual sales in the Central and Western Gulf of Mexico with less frequent sales held in the Eastern Gulf of Mexico and offshore Alaska. The program operates along all the coasts of the United States - with oil and gas production occurring on the Gulf of Mexico, Pacific, and Alaska and OCS.[4]

The Minerals Management Service

The Minerals Management Service (MMS), a bureau in the DOI, is the federal agency that manages the nation's natural gas, oil and other mineral resources on the OCS. The MMS also collects, accounts for and disburses more than $8 billion per year in revenues from federal offshore mineral leases. The MMS oversees two major programs: Offshore Minerals and Minerals Revenue Management. The Offshore Minerals program, which manages the mineral resources on the OCS, comprises three regions: Alaska, the Pacific, and the Gulf of Mexico.[5]

The Gulf of Mexico OCS Region is made up of three planning areas along the Gulf Coast - the Western, Central, and Eastern Gulf of Mexico Planning Areas. These areas contain 43 million acres under lease. There are 3,911 offshore production platforms active in the search for natural gas and oil on the Gulf OCS. These production facilities contribute significantly to the nation's energy supply.[6]

Eastern Gulf of Mexico Planning Area[7]

The Eastern Gulf of Mexico Planning Area extends along the Gulf's northeastern coast for some 700 miles, from Baldwin County, Alabama, southward to the Florida Keys. The area encompasses approximately 76 million acres, with water depths ranging from approximately 30 feet to nearly 10,000 feet. The area extends for more than 300 miles seaward of the state/federal boundary (9 miles off the Florida coast).

Since the late 1980's, a limited amount of OCS activity has taken place in the Eastern Gulf of Mexico Planning Area because of administrative deferrals and annual congressional moratoria.

The MMS has estimated that between 6.95 and 9.22 trillion cubic feet of natural gas and 1.57 and 2.78 billion barrels of oil and condensate are contained in the Eastern Gulf of Mexico Planning Area. Drilling for natural gas and oil has been occurring in the Eastern Gulf of Mexico offshore Alabama and Florida for more than three decades. The first of 11 natural gas and oil lease sales held offshore Florida occurred in 1959 and resulted in the issuance of 23 leases. Additional lease sales have been held periodically in the Eastern Gulf from 1973 through 2003. Currently, there are 241 active leases in the Eastern Gulf of Mexico Planning Area.

Exploratory drilling started in the Eastern Gulf of Mexico in the mid-1970's with the drilling of Destin Dome Block 162, located 40 miles south of Panama City, Florida. After two years of drilling and 15 dry holes, exploration stopped. To date, over 54 exploratory wells have been drilled in the Eastern Gulf of Mexico. Thirteen wells discovered natural gas, condensate, and crude oil.

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[3] http://www.mms.gov/offshore/
[4] http://www.mms.gov/offshore/
[5] http://www.mms.gov/aboutmms/
[6] http://www.gomr.mms.gov/homepg/offshore/gulfocs/gulfocs.html
[7] http://www.gomr.mms.gov/homepg/offshore/egom/eastern.html

Three Eastern Gulf lease sales were made in the 1980's and there was renewed industry interest in the Destin Dome area. In the late 1980's, Chevron U.S.A. and Gulfstar made natural gas discoveries in the area.

In October 1995, 73 oil and gas leases located *south* of 26° N. latitude (the approximate latitude of Naples, Florida) were returned to the federal government as part of a litigation settlement. Consequently, no active Federal natural gas and oil leases exist off southwest Florida. Likewise, no active leases exist in the Straits of Florida Planning Area or off Florida's east coast (South Atlantic Planning Area).

In 1996, a development plan was filed by Chevron U.S.A. and partners on the Destin Dome 56 Unit. On July 24, 2000, Chevron U.S.A. and partners filed a lawsuit against the U.S. government for denying the companies "timely and fair review" of plans and permits relating to the Destin Dome 56 Unit. In May 2002, the Department agreed to settle the litigation with the oil companies. The companies -- Chevron, Conoco and Murphy Oil -- relinquished seven of nine leases in the unit that were the subject of the litigation in exchange for $115 million. The remaining two leases, Destin Dome Blocks 56 and 57, are to be held by Murphy and will be suspended until at least 2012, under the terms of the agreement. Murphy agreed not to submit a development plan on the two remaining leases before 2012, the year when the current moratoria will expire. Under the terms of the agreement, the leases can not be developed unless approved by both the federal government and the State of Florida.

Unocal began the first production in the Eastern Gulf Planning Area in mid-February 1999 on Pensacola Block 881. Located approximately 12 miles offshore Alabama, this site involves the production of some 5 million cubic feet of natural gas per day.

In October 1999, Gulfstream Natural Gas Systems (ANR) and Buccaneer Gas Pipeline Company (Transco/Williams) submitted pipeline right-of-way applications to the MMS for the construction of two 400-mile (36-inch) natural gas pipelines spanning the Eastern Gulf of Mexico. The Gulfstream right-of-way was approved by MMS on June 1, 2001. This line went into service in June 2002.

In November 1996, DOI released the OCS Oil and Gas Leasing Program (1997-2002). The program included 16 lease sales, with one sale proposed for the Eastern Gulf of Mexico in 2001. The original sale area was reviewed to be consistent with the State of Florida's opposition to offshore oil and gas activities within 100 miles of its coast. The first steps in the 3-year planning process began on January 25, 1999, with the release of the Call for Interest and Information and the Notice of Intent to Prepare an Environmental Impact Statement. A draft environmental impact statement was released in December 2000 and a final EIS was made available to the public in July 2001.

In July 2001, Sale 181 was adjusted from 5.9 million acres to about 1.5 million acres or 256 blocks. The adjusted area lies more than 100 miles off the Alabama/Florida State line. Twenty-three blocks in this area were under lease at that time. Lease Sale 181 was held on December 5, 2001. MMS awarded leases on 95 tracts involving $340,474,113. Seventeen companies participated in this sale.

On December 10, 2003, Eastern Gulf of Mexico Sale 189 was held. Six companies participated in the lease sale that offered 138 blocks comprising approximately 794,880 acres offshore Alabama. The highest bid received was $2.2 million, submitted by Shell and Nexen.

In an August 22, 2005, Department of Interior news release, it was announced that the MMS is seeking initial public comment on the development of its 2007-2012 five-year leasing plan for energy development on the Outer Continental Shelf (OCS) and accompanying environmental impact statement.[8] This includes the Eastern Gulf of Mexico Planning Area. The announcement stated:

[8] http://www.doi.gov/news/05_News_Releases/050822.htm

The announcement is the first step in a two-year process to develop the leasing plan. It does not include proposals for new lease sales but instead asks the public for general information and comment not only on energy development but also on other economic and environmental issues in the OCS areas.

"The Outer Continental Shelf contains billions of barrels of oil and trillions of cubic feet of natural gas that can be safely produced," Interior Secretary Gale Norton said. "With our reliance on imports of foreign oil climbing each year, we would be irresponsible if we did not consider how we might develop these abundant domestic resources."

Presidential withdrawals or congressional moratoria have placed more than 85 percent of the OCS off the lower 48 states off limits to energy development.

The Bush Administration has repeatedly expressed its support for the existing moratoria, based upon deference to the wishes of the states to determine what activities take place off their coasts.

However, recent energy legislation passed by Congress calls for a comprehensive inventory and analysis of the oil and natural gas resources for all areas of the OCS.

Therefore, as MMS undertakes the process of drafting its proposal, the agency is seeking comment on the potential resources available in all areas of the OCS, recognizing that many of these areas are subject to existing moratoria and will not be fully analyzed for possible leasing. In seeking public comment, Secretary Norton reaffirmed the Bush Administration's pledge not to conduct any new leasing under the 2007-2012 five-year plan within 100 miles of Florida's coast, in the Eastern Gulf of Mexico Planning Area. MMS is also asking the public to comment specifically on whether the existing withdrawals or moratoria should be modified or expanded to include other areas in the OCS; and whether the Interior Department should work with Congress to develop gas-only leases.

The 2007-2012 OCS oil and gas leasing program will be the seventh program prepared since Congress passed the OCS Lands Act in 1978. The Act requires the Secretary of the Interior to prepare and maintain five-year programs for offshore oil and natural gas leasing. The current program runs through June 30, 2007.

Once public comment is received, MMS will develop a draft proposed program followed by a proposed program and draft EIS. The public will have an opportunity to comment on both documents.

The following is the schedule for the 2007-2012 five-year program:

Date	Step
August 24, 2005	Solicit comments and information (Federal Register Notice)
Winter 2005	Issue draft proposed program (60-day comment period)
Summer 2006	Issue proposed program and draft EIS (90-day comment period)
Winter 2007	Issue proposed final program and final EIS (60-day waiting period)
Spring 2007	Approve five-year program for July 2007-July 2012

The Exploration and Development Process

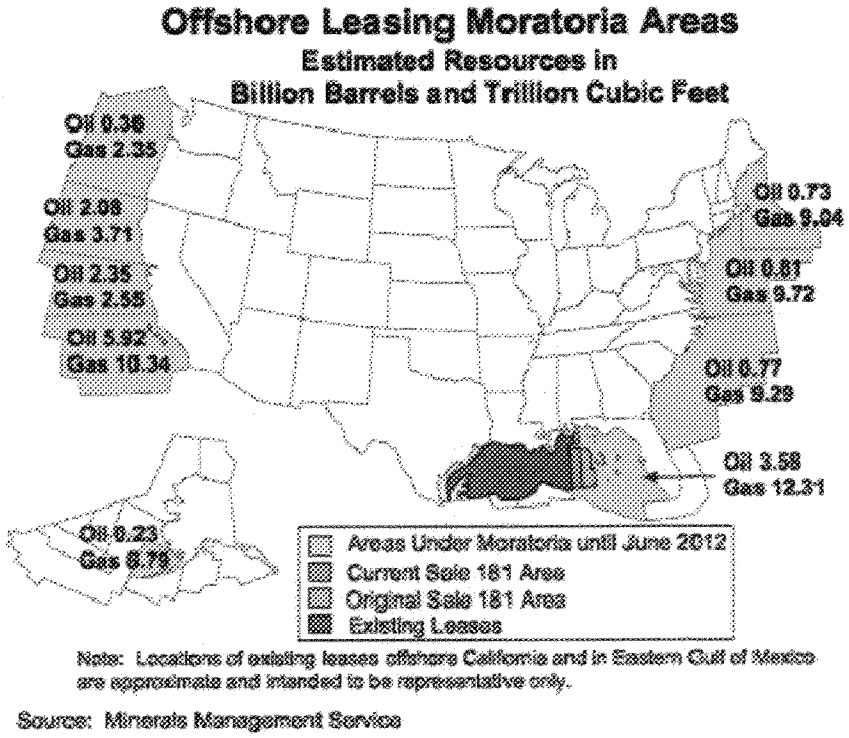
Once a company acquires a lease, the company has to prepare an exploration plan and have it approved by MMS and other federal and state agencies in order to drill a well. Typical exploration plans propose the drilling of one or more exploratory wells. The MMS conducts an environmental review of the impacts of drilling the well. Should a discovery be made, the company may then prepare and file a development plan. The exploration and development plans must be consistent with the affected state's Coastal Zone Management Plan

During exploratory drilling or production operations on the OCS, the MMS inspection program calls for MMS inspectors to review operations and periodically visit and inspect facilities to ensure clean and environmentally safe operations.

To prepare for lease sales and to protect the environment during offshore drilling operations, MMS conducts environmental studies. Several new studies are planned and/or currently underway.[9]

Federal Moratoria

Congress and past Presidents have placed moratoria on offshore drilling and development on the OCS on both the U.S. East and West Coasts. Included in the moratoria is the Eastern Gulf of Mexico. The consequence of the moratoria is to foreclose until at least 2012 any effort to explore for critical oil and gas resources that are estimated to lie beneath these areas. In response to recent sharp increases in fuel and home heating oil, several attempts have been made in Congress to limit or remove these moratoria. The map below illustrates these moratoria areas.[10]



[9] http://www.gomr.mms.gov/homepg/offshore/egom/eastern.html
[10] http://api-ep.api.org/issues/index.cfm

Current State Law

Under the provisions of Chapter 253, F.S., the Governor and Cabinet sitting as the Trustees of the Internal Improvement Trust Fund have been granted the powers and duties with regard to the control of private uses of state-owned submerged lands. These state-owned submerged lands extend waterward from the shoreline for approximately 9 miles into the Gulf of Mexico and 3 miles into Atlantic Ocean.[11] Section 253.61, F.S., expressly prohibits the Trustees from granting any "oil or natural gas *lease*" on state-owned submerged lands off the State's west coast. A similar provision in Section 377.24, F.S., prohibits the Department of Environmental Protection from issuing a *permit* "to drill a well in search of oil or gas" on the same state-owned submerged lands.

Onshore Storage of Petroleum Products

There are currently 11 ports along Florida's coast where petroleum products are shipped into the State. Each of these ports has one or more bulk petroleum storage facilities. The largest such facilities are located at Tampa (11 facilities with 162 million gallons of unleaded gasoline and 65 million gallons of diesel), Port Everglades (13 facilities with 147 million gallons of unleaded gasoline and 51.5 million gallons of diesel), Jacksonville (9 facilities with 95.5 million gallons of unleaded gasoline and 53 million gallons of diesel), Pensacola (2 facilities with 13 million gallons of unleaded gasoline and 3 million gallons of diesel), and Cape Canaveral (1 facility with 12.5 million gallons of unleaded gasoline and 5 million gallons of diesel).

Hurricane Katrina caused significant damage to bulk petroleum storage facilities along the Louisiana coast. According to the U.S. Coast Guard, Hurricane Katrina caused 6 major spills (> 100,000 gallons) at such facilities, 4 medium spills (>10,000 gallons), and 134 minor spills (< 10,000 gallons) in Louisiana. The total volume from all spills was approximately 8 million gallons. As of November 5, 2005, 3.5 million gallons had been recovered, 2 million gallons evaporated, and 2 million gallons naturally dispersed, leaving approximately 400,000 gallons to be addressed.[12]

Effect of Proposed Changes

The bill supplements current state law with regard to leasing and permitting for oil and natural gas exploration and production on state-owned submerged lands. The bill prohibits the Trustees from granting any type of use of state-owned submerged lands for the exploration for or the production of oil or natural gas. This would include not only a lease, but also an easement, sale, or consent of use.

Section 163.3177(6)(g), F.S., requires all coastal counties and municipalities to adopt a coastal management element as part of their local comprehensive plans. Section 163.3178, sets forth the required components of the coastal management element that are designed to "protect human life and limit public expenditures in areas that are subject to destruction by natural disasters." One of the required components is the establishment of "high-hazard coastal areas" which are evacuation zones for a category 1 hurricane as established in the regional hurricane evacuation study applicable to the particular local government (see Florida Administrative Code Rule 9J-5.003).

The bill requires terminal facilities that store bulk fuel and which are located in high-hazard coastal areas to have dike fields surrounding the facility that are designed and maintained to withstand the winds and storm surge associated with a hurricane. The dike fields are also to be designed and maintained to manage stormwater and to prevent any discharges from the dike field.

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[11] Section 1, Article II, Florida Constitution

[12] http://www.uscgstormwatch.com/go/doc/1008/87976/

C. SECTION DIRECTORY:

Section 1. Amends s. 206.022, F.S., to add subsection (3) relating to requirements for bulk fuel storage terminal facilities.

Section 2. Amends paragraph 253.03, F.S., to add a provision prohibiting the use of sovereignty submerged lands for activities associated with the exploration for or the production of oil or natural gas.

Section 3. Provides an effective date.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None

2. Expenditures:

None

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None

2. Expenditures:

None

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The requirement to design and maintain dike fields around bulk fuel storage terminal facilities to withstand wind and storm surge from hurricanes will result in substantial costs to oil companies. Those costs will depend on the velocity of the wind and the height of the storm surge to which the dike fields must be designed. Therefore, the costs to the industry are indeterminate at this time.

D. FISCAL COMMENTS:

None

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable, because this bill does not appear to: require the counties or cities to spend funds or take an action requiring the expenditure of funds; reduce the authority that cities or counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other:

None

B. RULE-MAKING AUTHORITY:

The bill does not require the promulgation of rules by nor alter the rulemaking authority of any state agency.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None

IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

A bill to be entitled

An act relating to the use of land for the exploration, production, and storage of petroleum and natural gas; amending s. 206.022, F.S.; requiring bulk fuel storage terminal facilities located in high-hazard coastal areas to be surrounded by dike fields meeting certain design and maintenance criteria; amending s. 253.03, F.S.; prohibiting the use of sovereignty submerged lands for activities associated with the exploration for and production of oil and natural gas; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Subsection (3) is added to section 206.022, Florida Statutes, to read:

206.022 Application for license; terminal operators; bulk fuel storage terminal facility in high-hazard coastal area.--

(3) Any bulk fuel storage terminal facility located within an area of the state designated as a high-hazard coastal area as defined in any local government comprehensive plan pursuant to s. 163.3178 shall have dike fields surrounding the facility that are designed and maintained to:

(a) Withstand the wind and storm surge effects associated with a hurricane.

(b) Manage stormwater and prevent discharges from the dike field.

Section 2. Paragraph (b) of subsection (7) of section 253.03, Florida Statutes, is amended to read:

253.03 Board of trustees to administer state lands; lands enumerated.--

(7)

(b) With respect to administering, controlling, and managing sovereignty submerged lands, the Board of Trustees of the Internal Improvement Trust Fund also may adopt rules governing all uses of sovereignty submerged lands by vessels, floating homes, or any other watercraft, which shall be limited to regulations for anchoring, mooring, or otherwise attaching to the bottom; the establishment of anchorages; and the discharge of sewage, pumpout requirements, and facilities associated with anchorages. The regulations must not interfere with commerce or the transitory operation of vessels through navigable water, but shall control the use of sovereignty submerged lands as a place of business or residence. <u>The use of sovereignty submerged lands for activities associated with the exploration for or the production of oil or natural gas is expressly prohibited.</u>

Section 3. This act shall take effect July 1, 2006.

U.S. Mineral
Management Service
Presentation

MMS Director Johnnie Burton

Presentation to the Florida House of Representatives Water and Natural Resources Committee December 7, 2005

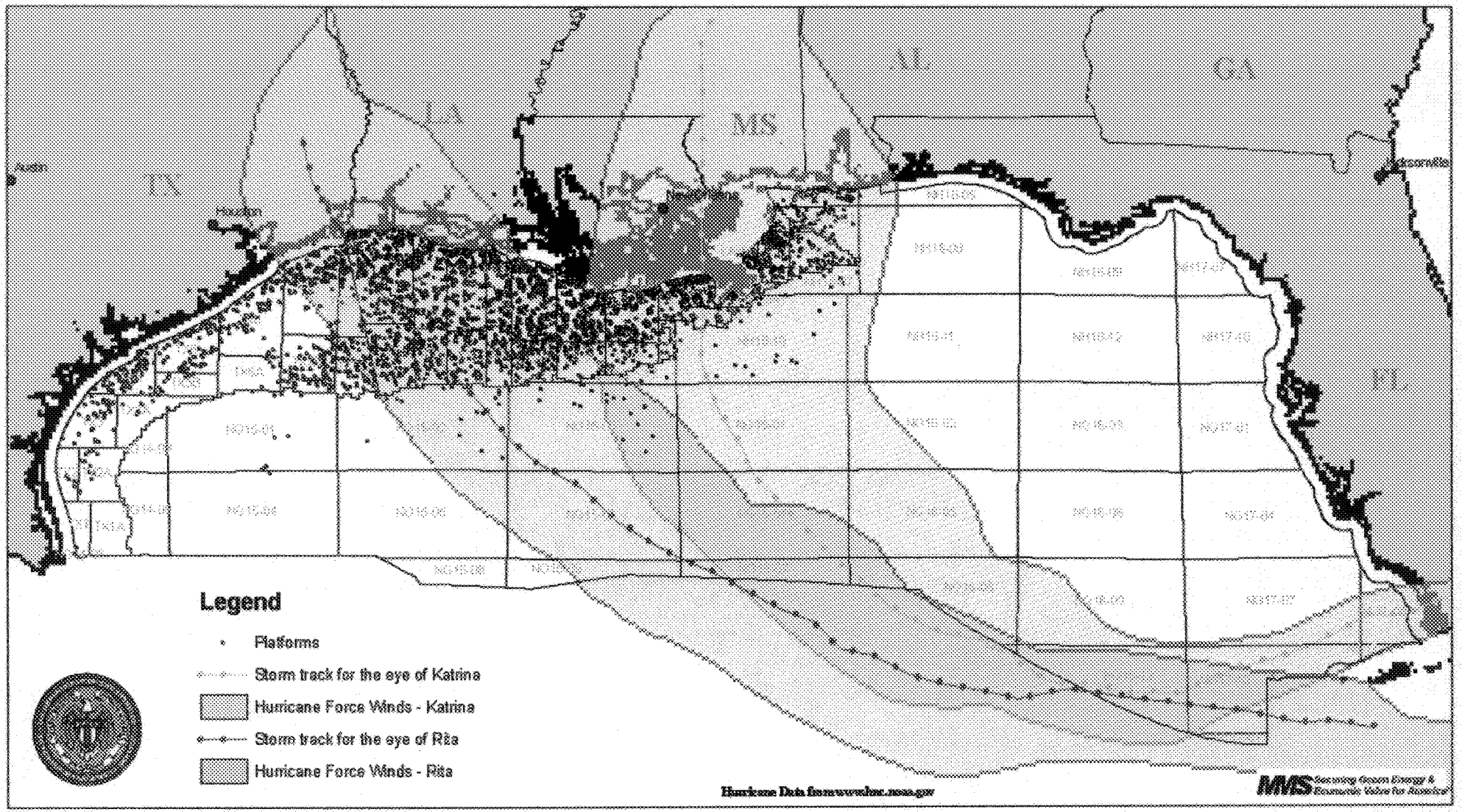
Minerals Management Service

Gulf of Mexico Daily Production Statistics (Pre-Hurricane)

Daily Oil Production	1.5 million BOPD
Daily Gas Production	10 BCFPD
# Production Platforms	3,945

**As of 6/1/2005

Hurricanes Rita and Katrina, August - September 2005



Damage from Hurricanes Katrina & Rita

Platforms

- 113 platforms were destroyed
- 52 platforms with extensive damage

Rigs

- 8 jackup rigs destroyed
- 19 semisubs/jackups adrift

Mars – Before Katrina

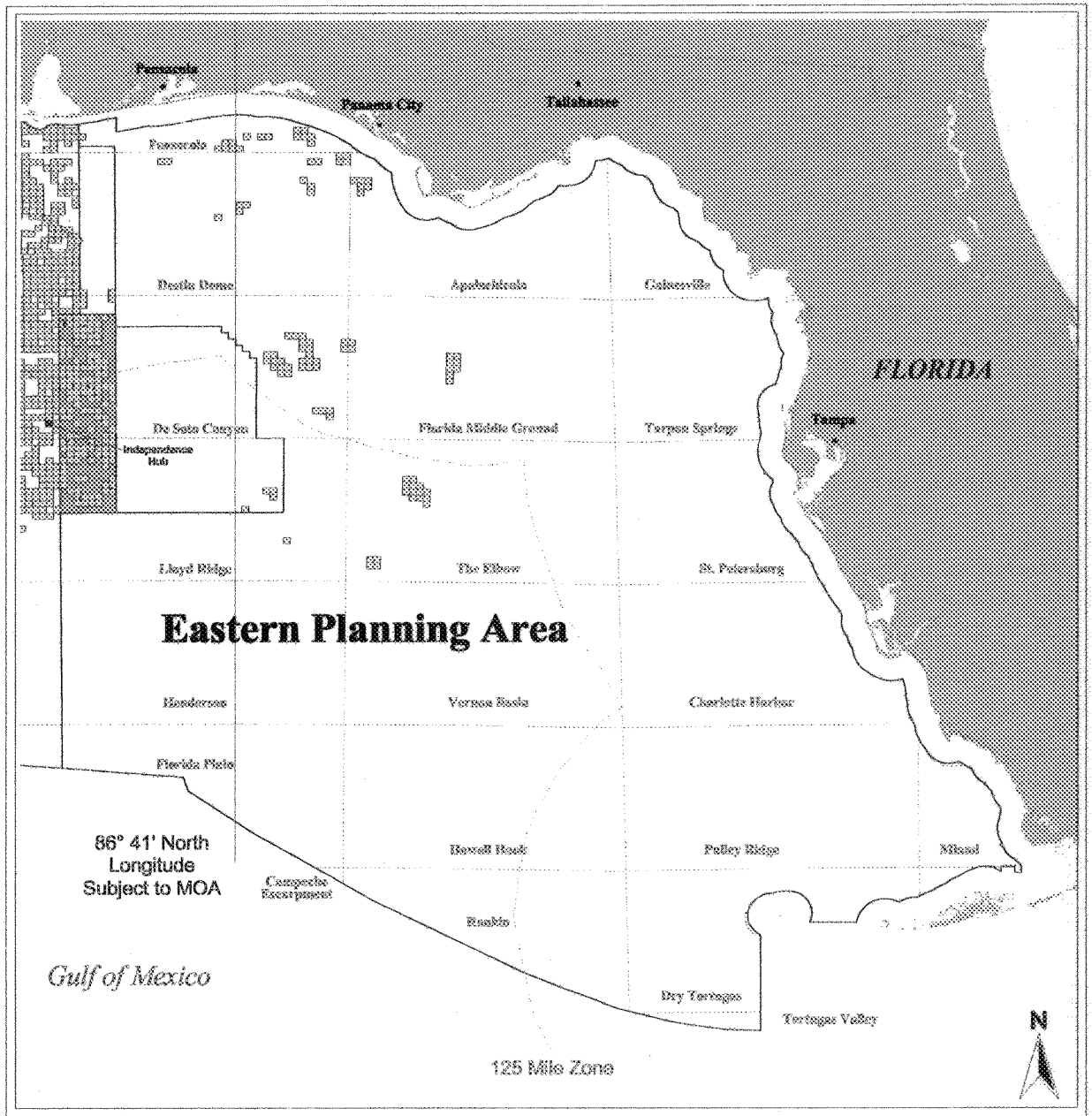
Mars – After Katrina

Typhoon – Before Rita

Typhoon – After Rita

Eastern Gulf of Mexico Planning Area

Minerals Management Service



Leases in Eastern Planning Area

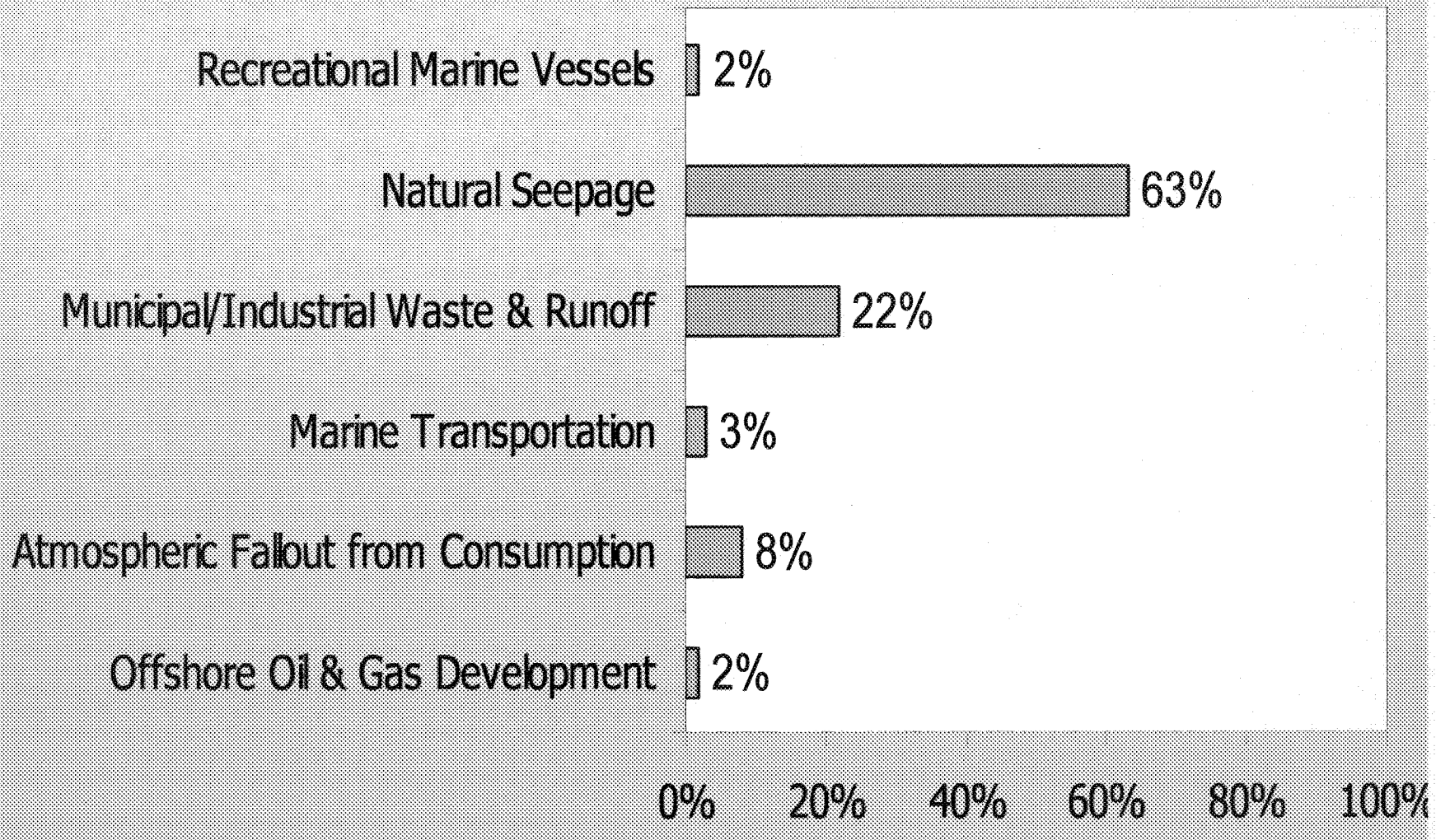
- Drilling Activity
- Original Sale 181 Area
- Final Sale 181 Area
- Active Leases as of November 28, 2005
- Planning Area Boundary
- Protraction/Map Area Boundary

MMS U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

December 7, 2005

The OCS Record

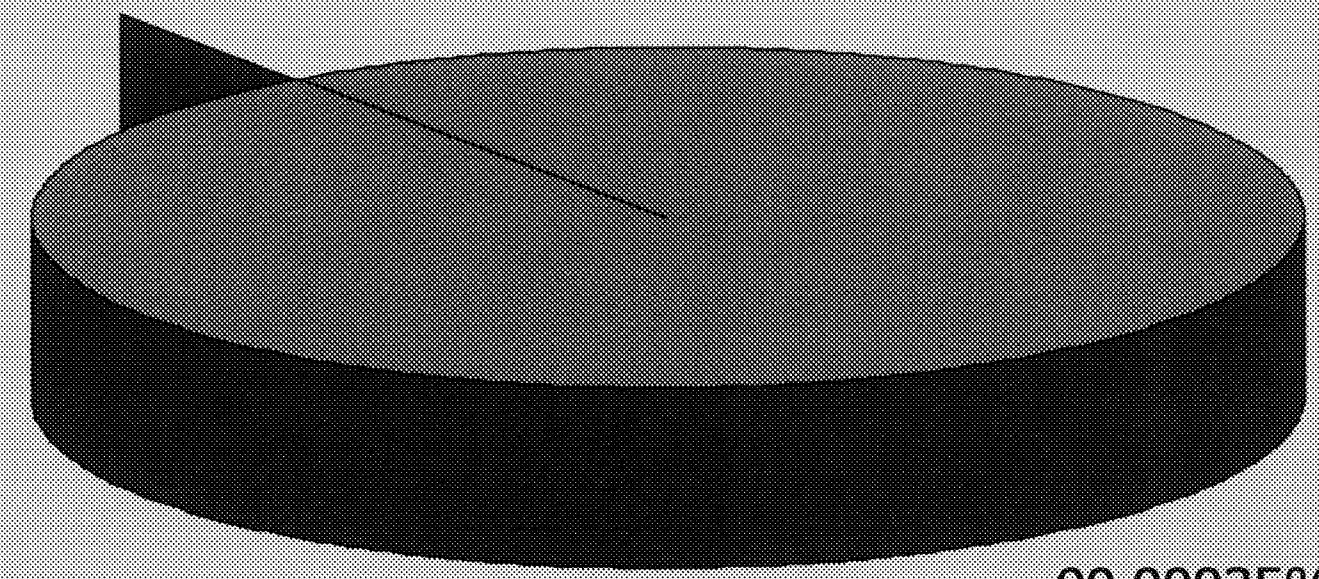
North American Sources of Oil in the Sea



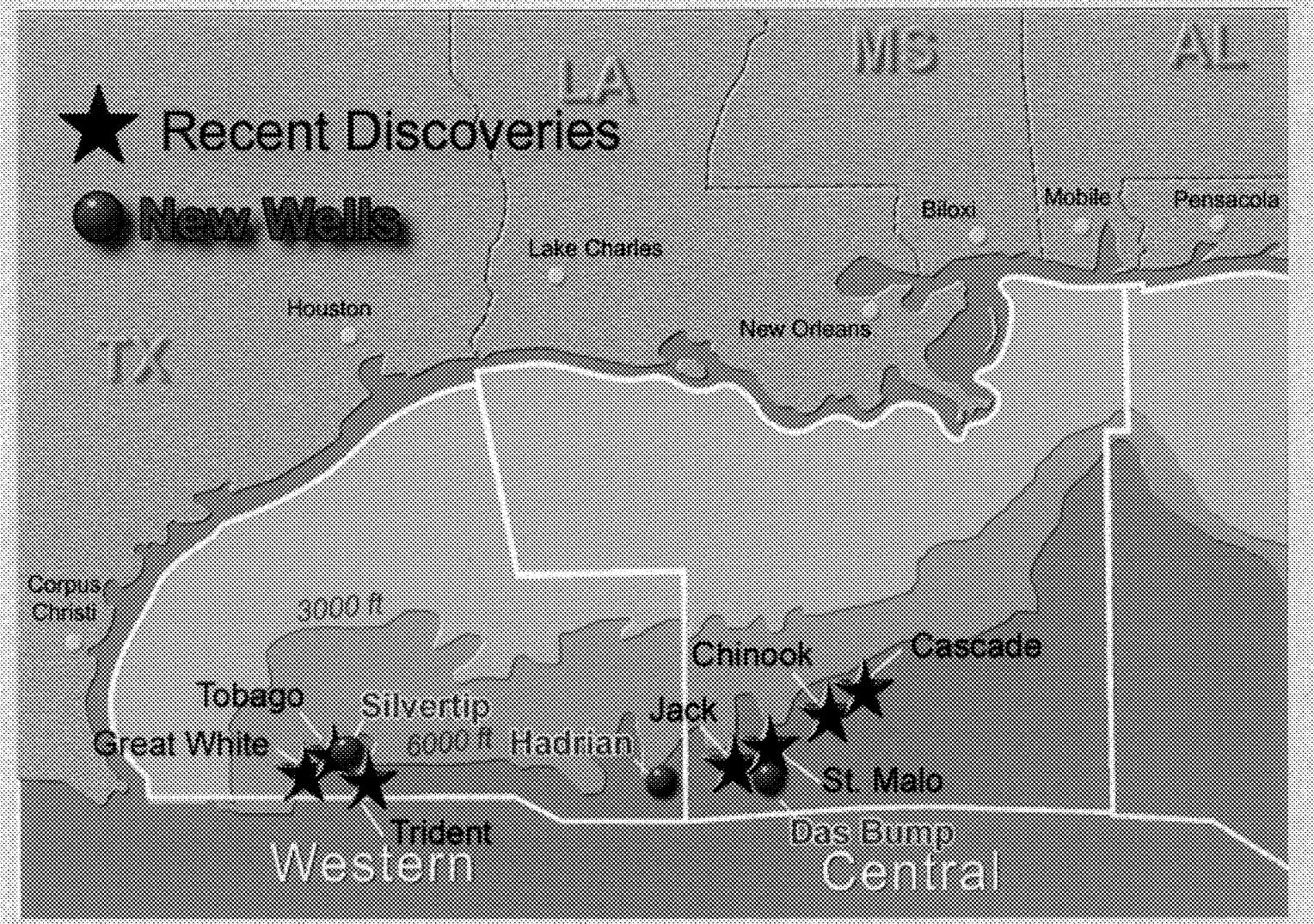
Source: National Academy of Sciences, 2002, Oil in the Sea III

Volume Spilled: 1991-2000

- Of the more than 6 billion barrels of oil produced on the OCS since 1985, *only 1/1000th of one percent* has been spilled.

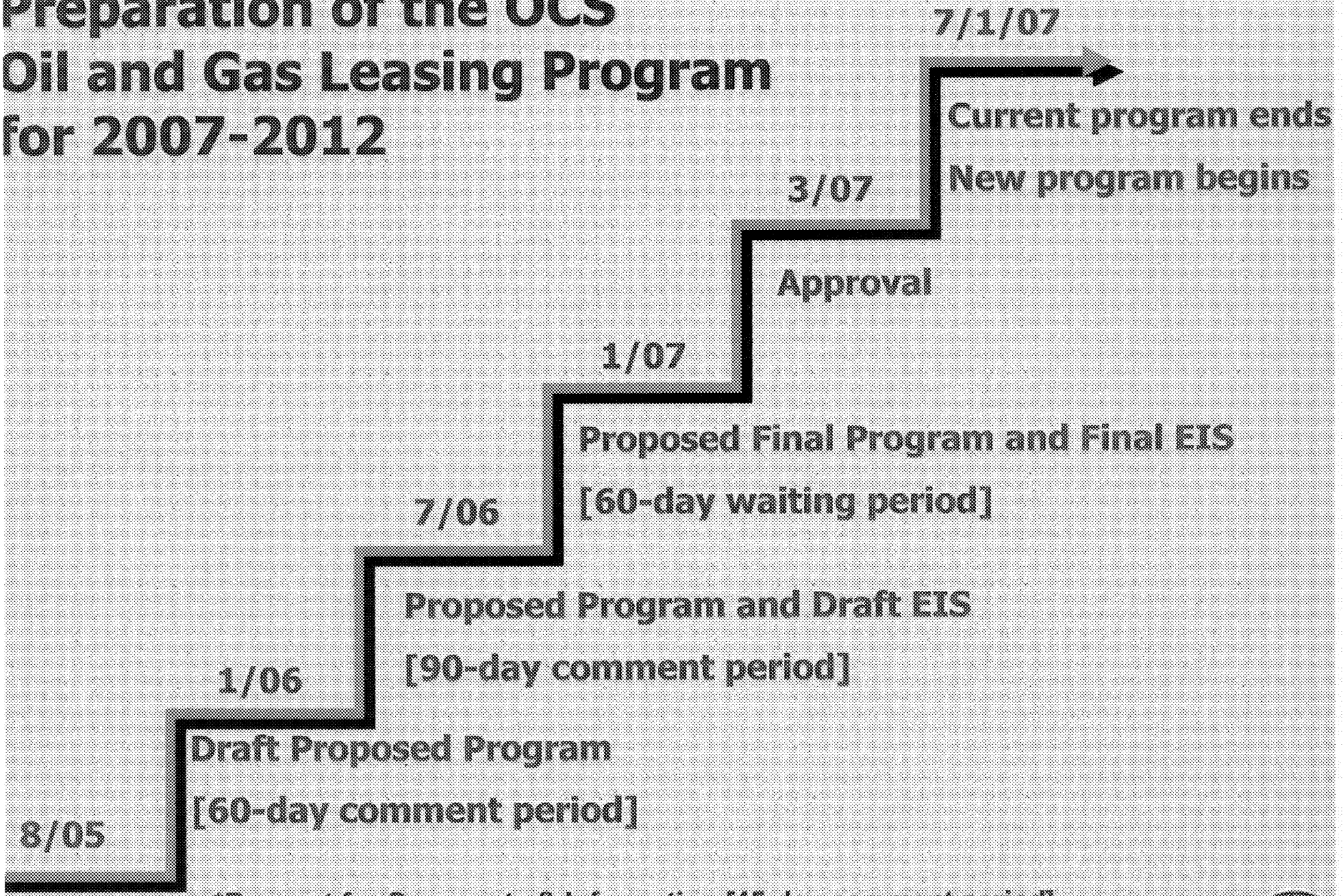


Recent Ultra-Deep Water Activity



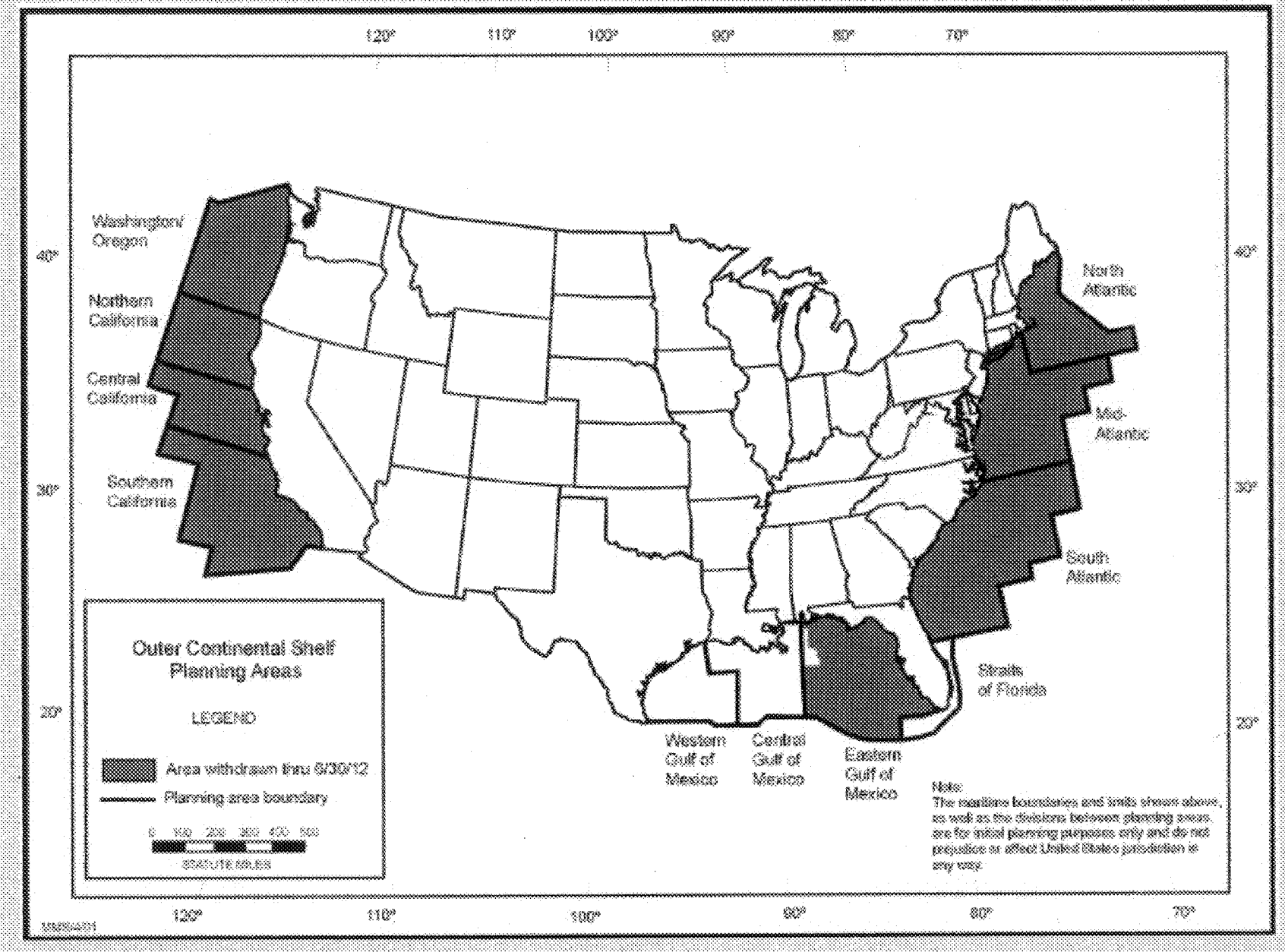
- 2004 – 14 new deepwater startups, 12 deepwater discoveries
- Water depths >7,000 feet (1.3 miles)

Preparation of the OCS Oil and Gas Leasing Program for 2007-2012



Minerals Management Service

OCS Planning Areas – Lower 48 States
Areas Withdrawn



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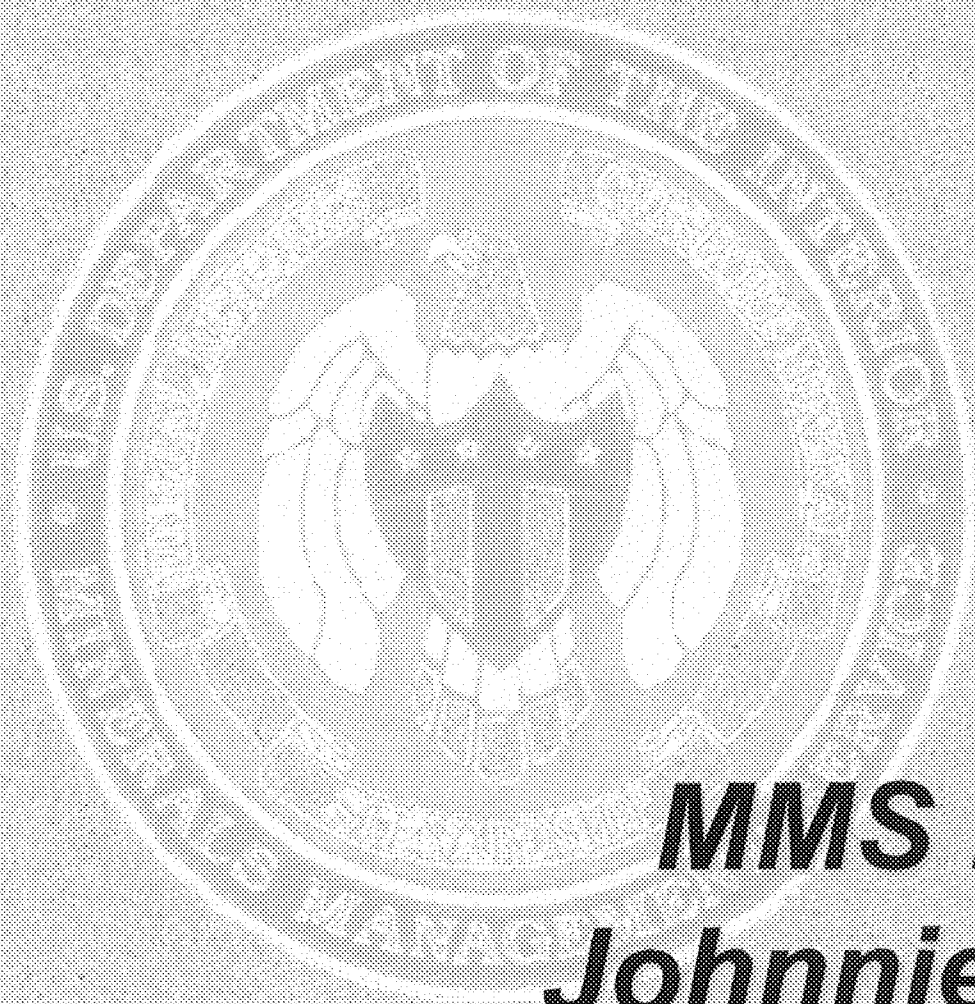


MMS Director
Johnnie Burton

DEP Presentation

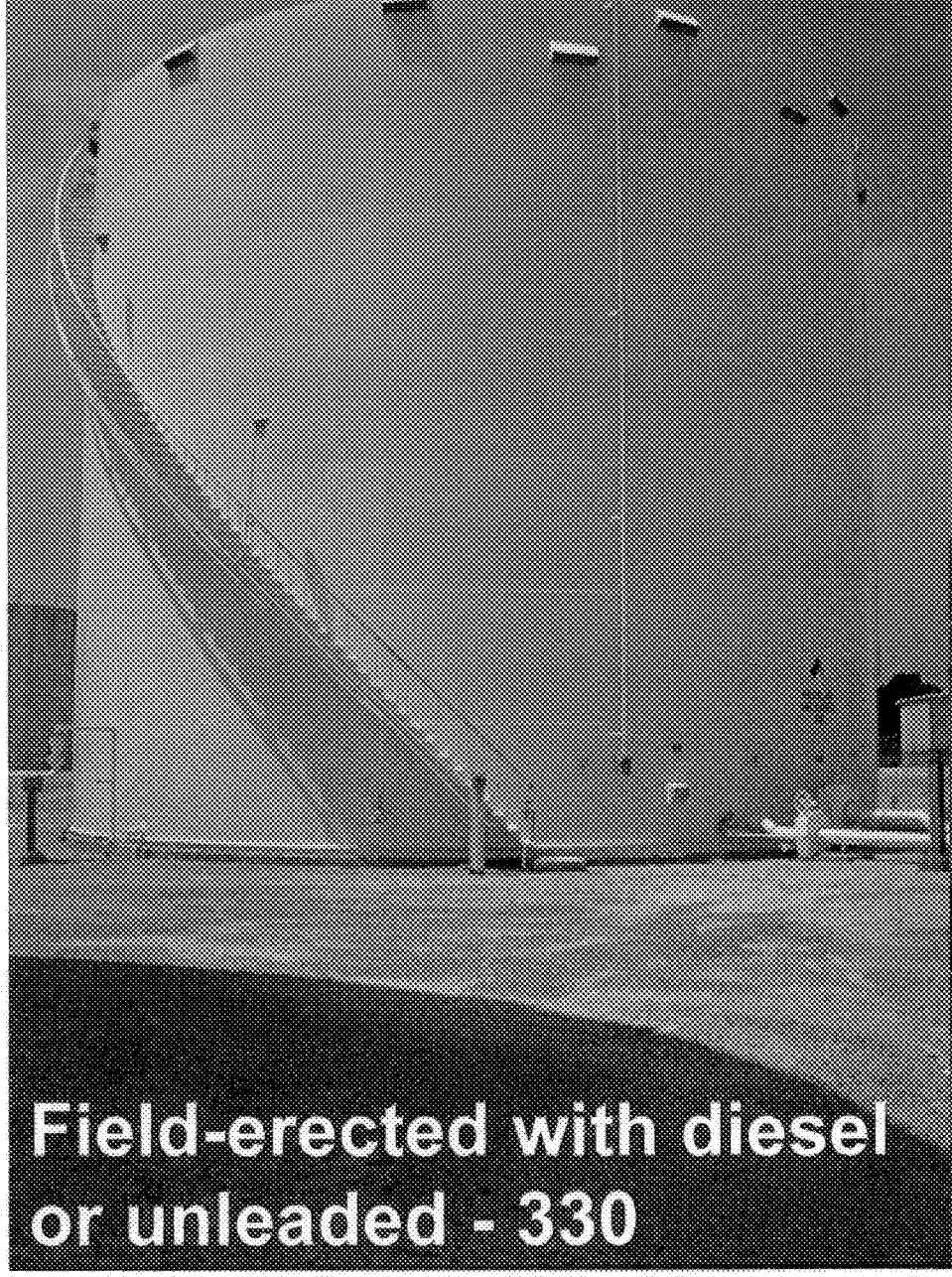
Aboveground Storage Tank System Regulation, Fuel Distribution, and Hurricane Effects in Florida

Florida's Storage Tank Regulation Program:

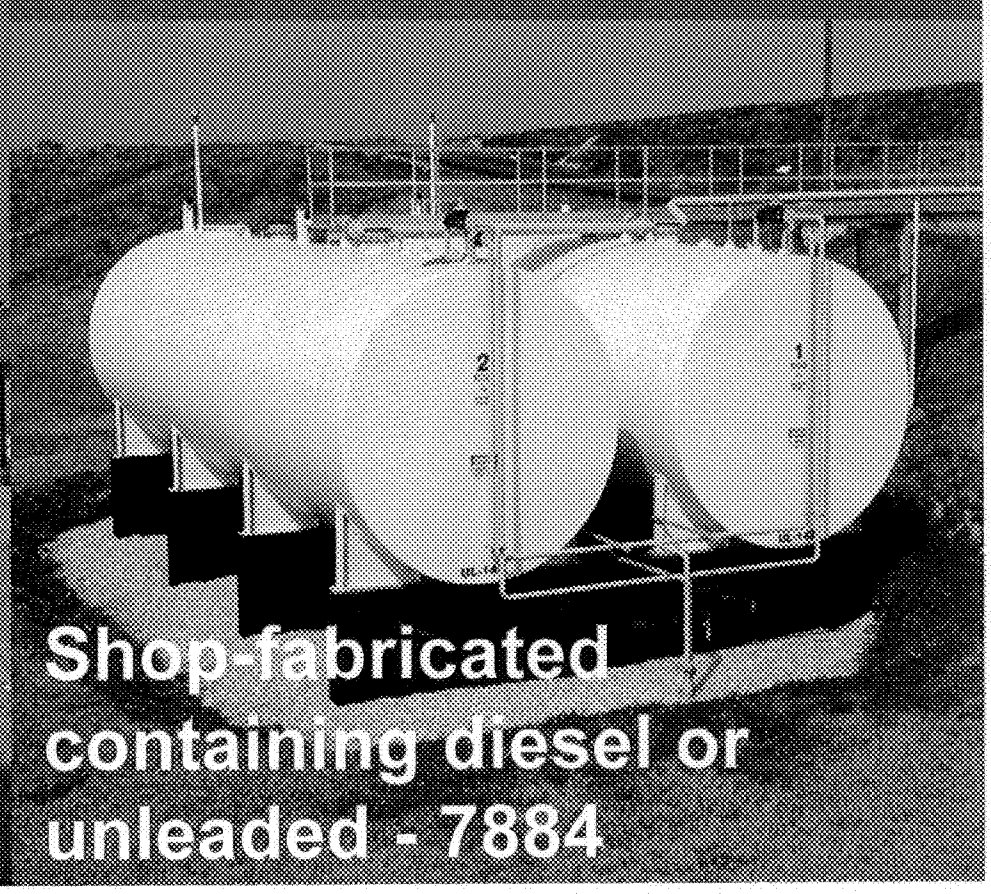
- First in the U.S. to pass tank legislation
- First Rules adopted in 1984
- One of 25 States that regulate AST's (Aboveground Storage Tanks)
- Has the most stringent AST rules in the country

AST Statistics

Active Regulated - 20,269
Bulk Product - 1,015
Shop-fabricated - 19,254



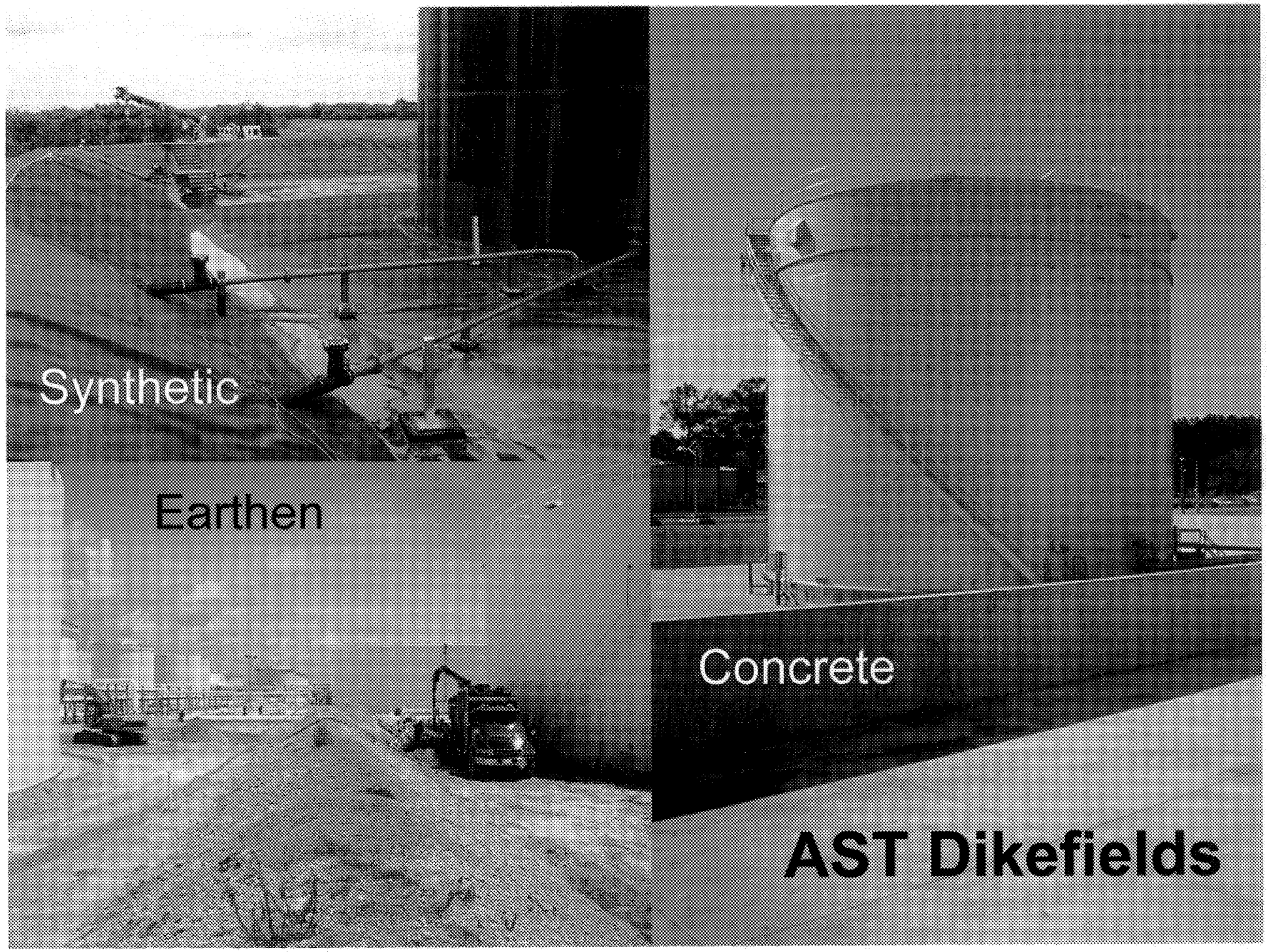
Field-erected with diesel or unleaded - 330



Shop-fabricated containing diesel or unleaded - 7884

Florida's Aboveground Storage Tank (AST) Rules

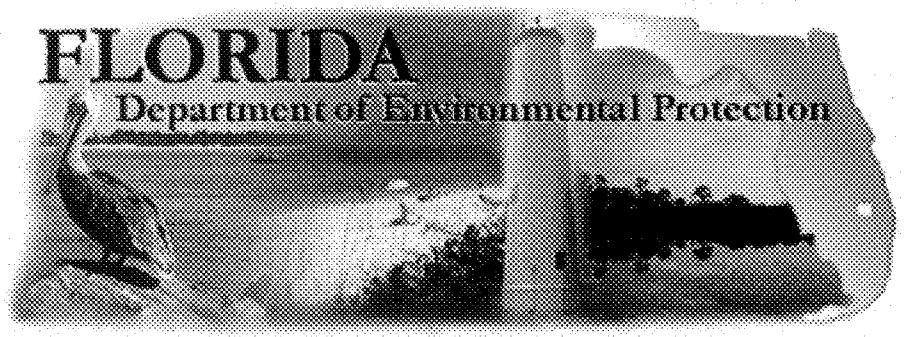
- New Tanks, Dike Fields, and Piping must have secondary containment
- Existing Tanks and Piping must have secondary containment by Jan 1, 2010
- Dike Fields must be constructed to meet NFPA 30 (National Fire Protection Association Standard), Section 2-3.4.3


Synthetic
Earthen
Concrete
AST Dikefields

NFPA 30 and DEP Rules
Current Requirements for Dikefields

- Must be sized to contain 110% of the capacity of the largest tank within the dikefield
- Must be no closer than ten feet from the property line
- Generally restricted to six feet in height
- Must be liquid tight

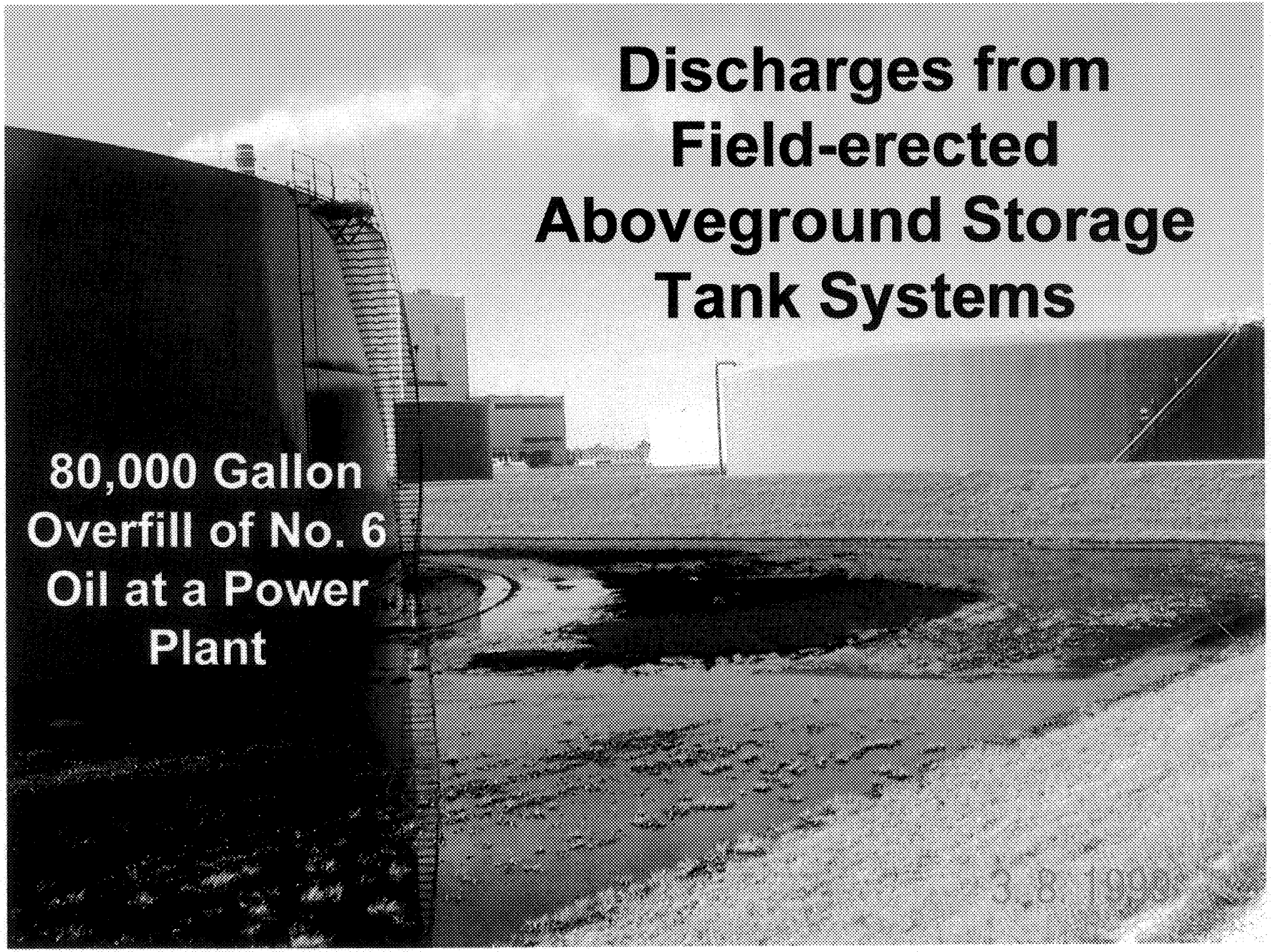
AST/UST Compliance Verification Program



- **DEP contracts with County governments to perform annual inspections**

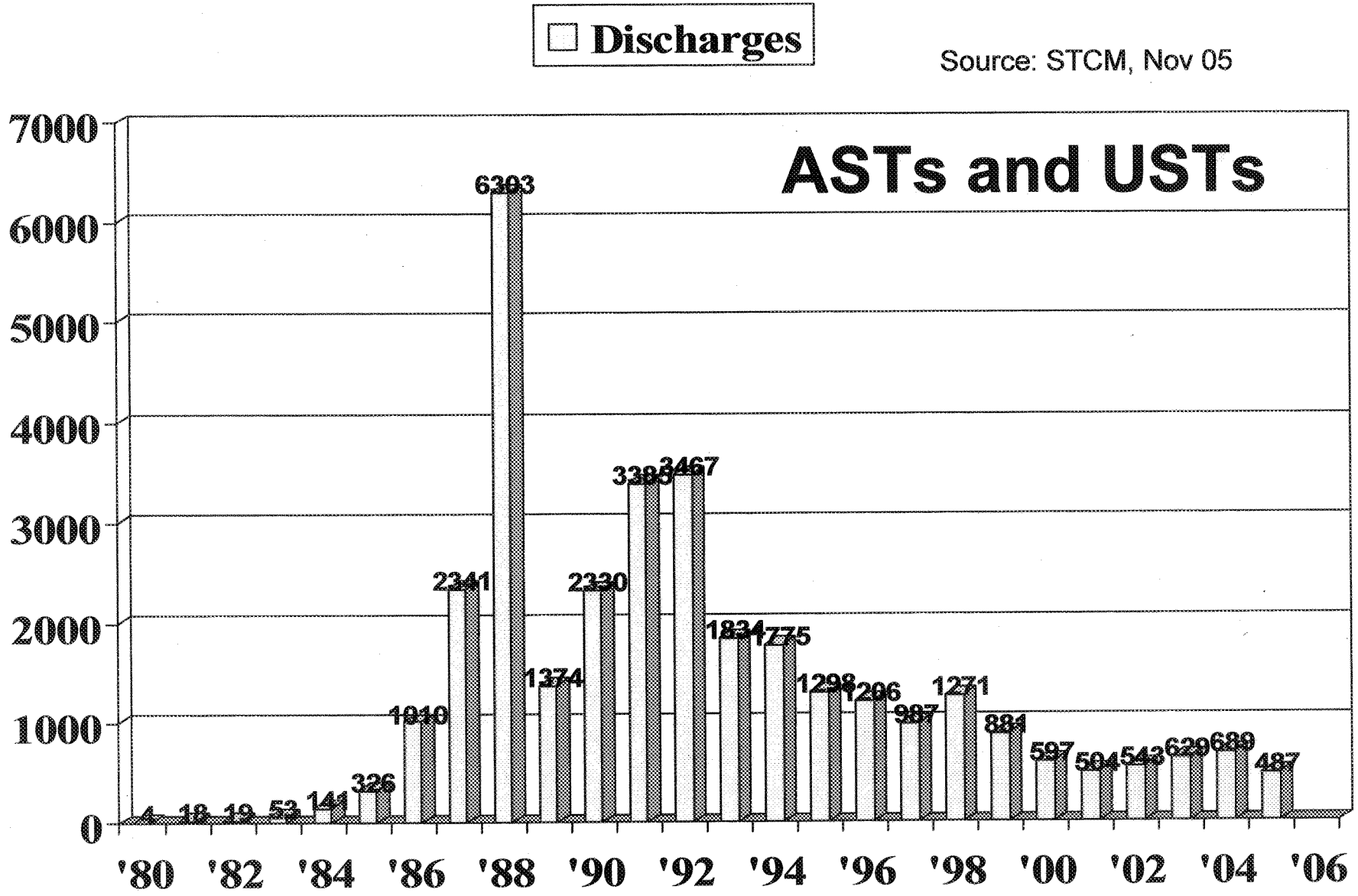
- Approximately 27,000 AST & UST inspections per year with high facility compliance rates
- Nearly 500,000 inspections performed since 1986

Discharges from Field-erected Aboveground Storage Tank Systems



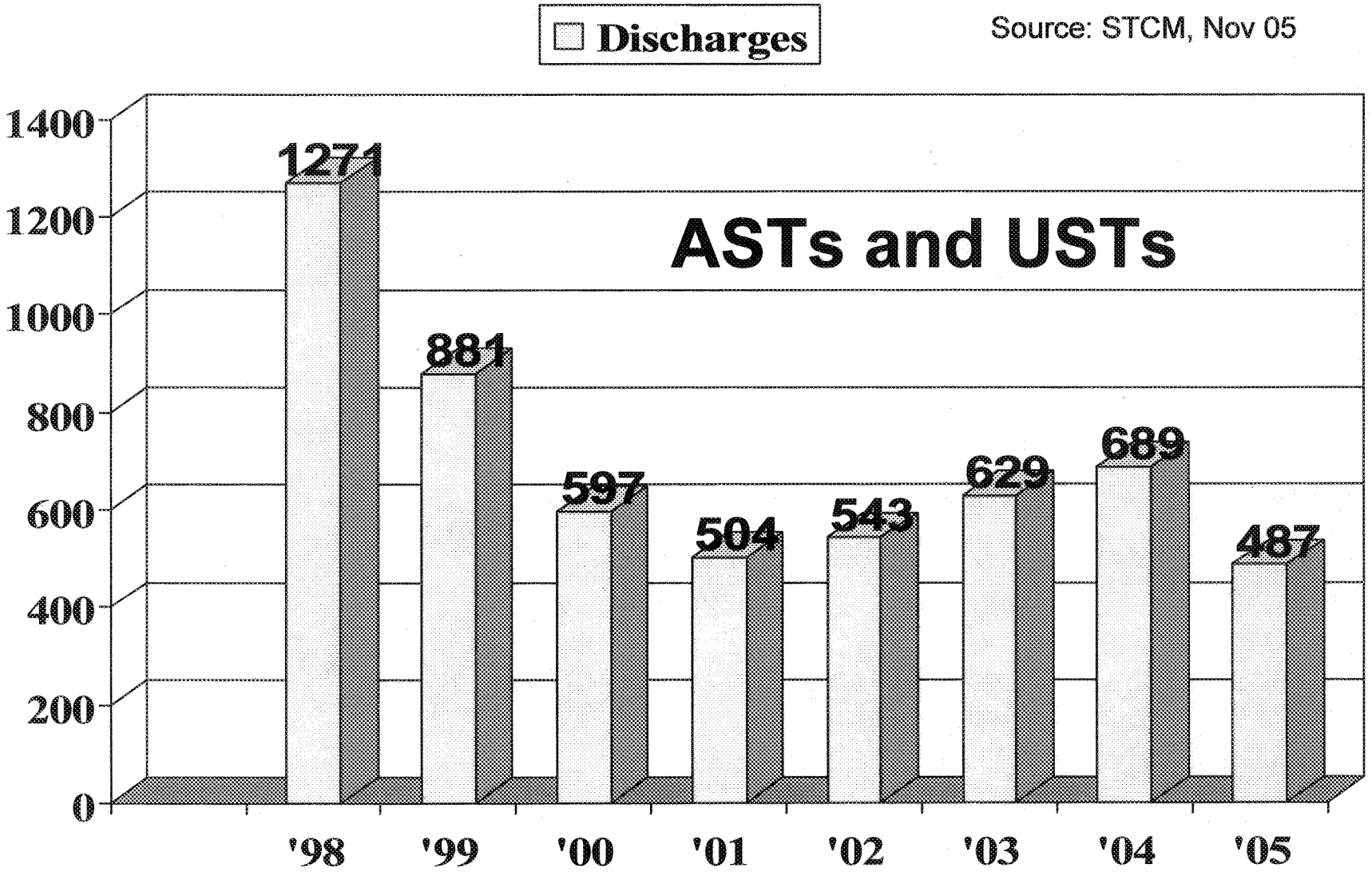
80,000 Gallon Overfill of No. 6 Oil at a Power Plant

Petroleum Discharge Report Forms Received



32,097 Discharge Report Forms Received from 23,789 facilities

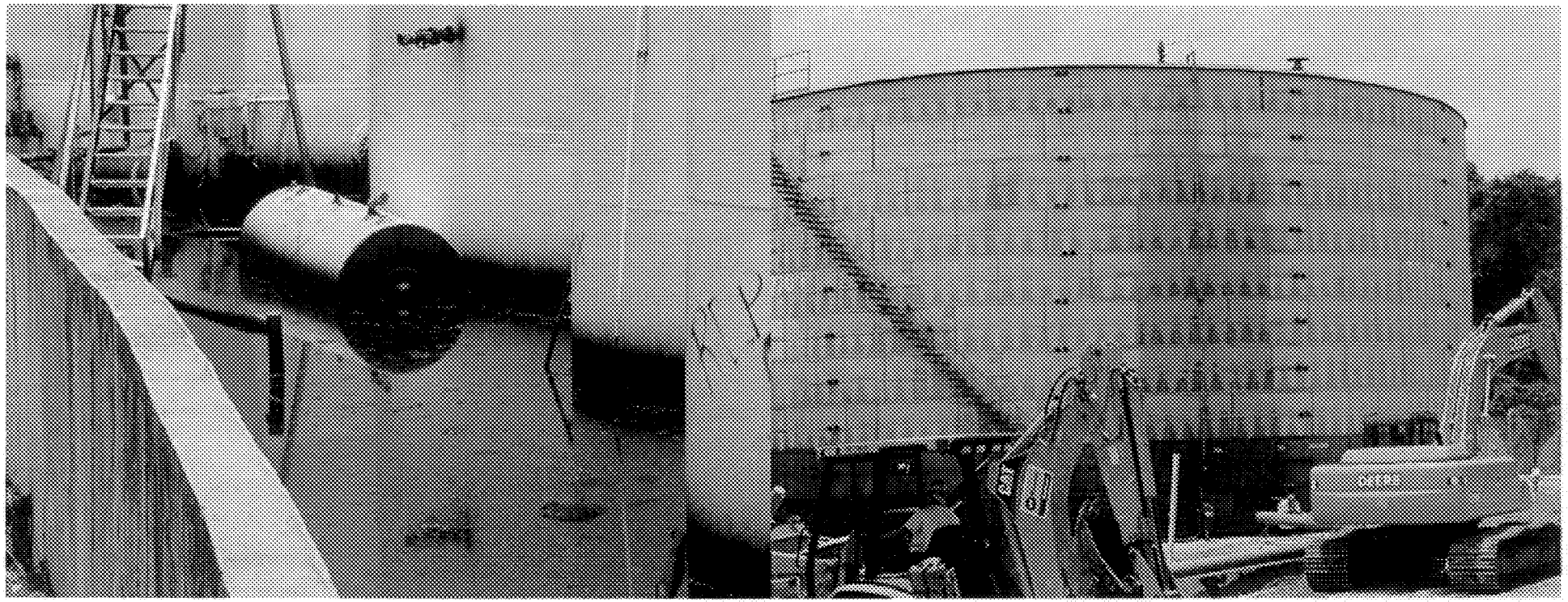
Post-1998 Petroleum Discharge Report Forms Received

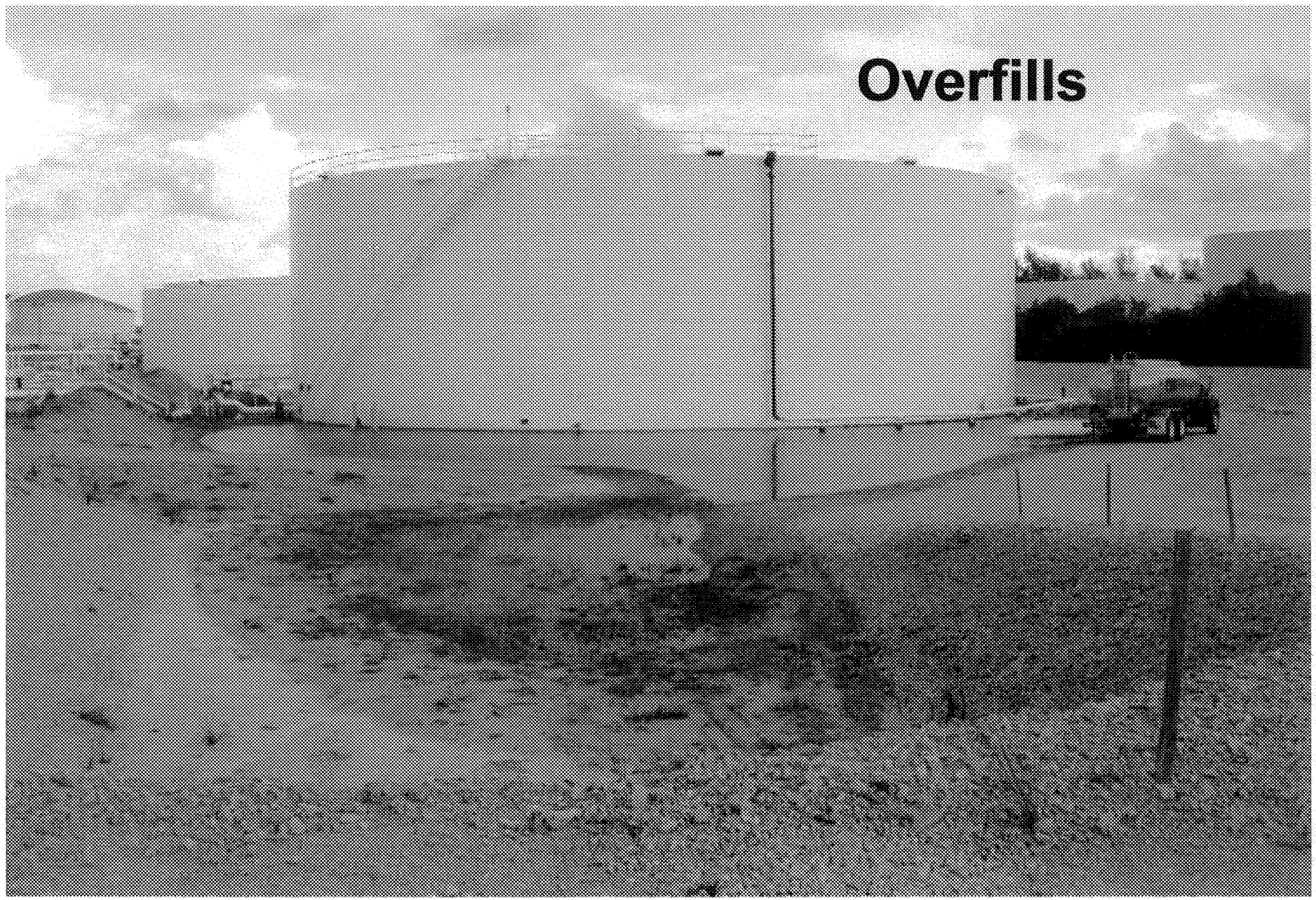


5601 Post-1998 Discharge Report Forms Received

Discharges by Tank Type

Tank Type	Facilities	Discharges
Field-erected ASTs	276	1031
Shop-fabricated ASTs	5658	8251
USTs	22,433	30,368

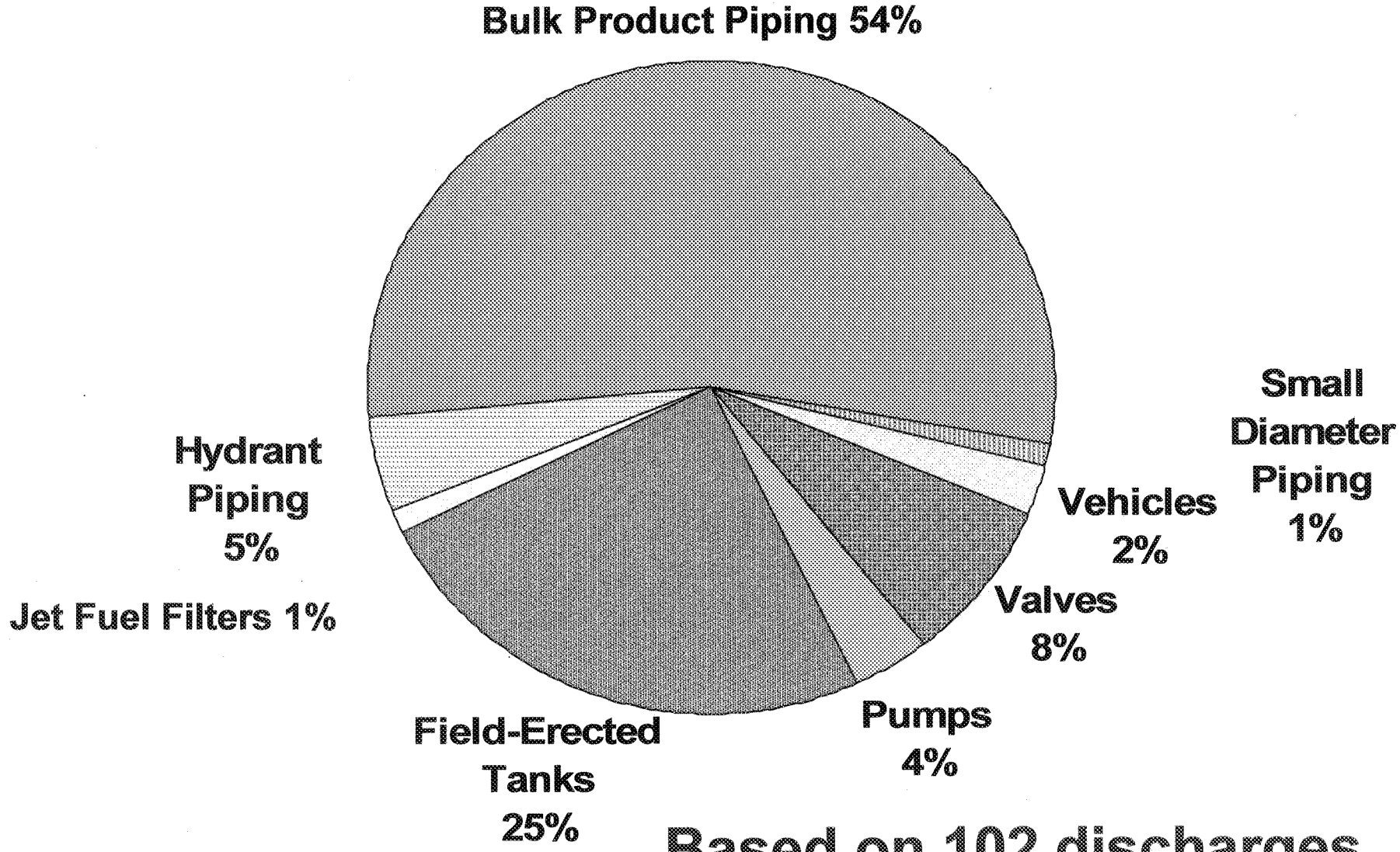




80,000 gallon overfill of jet fuel at Port Everglades

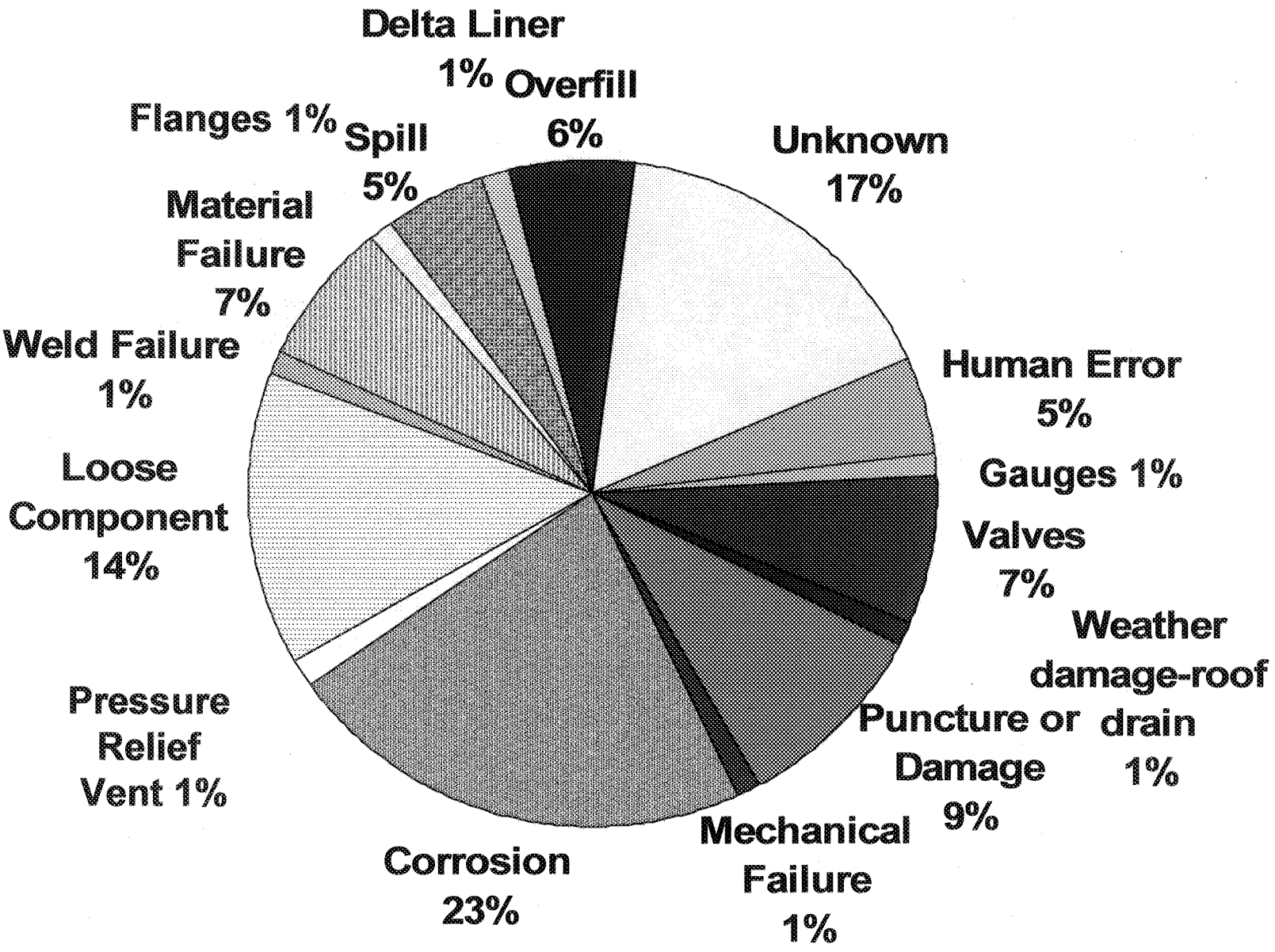
6,000 gallon jet fuel discharge from airport piping

DEP Leak Autopsy Study- Field-Erected AST Sources



Based on 102 discharges

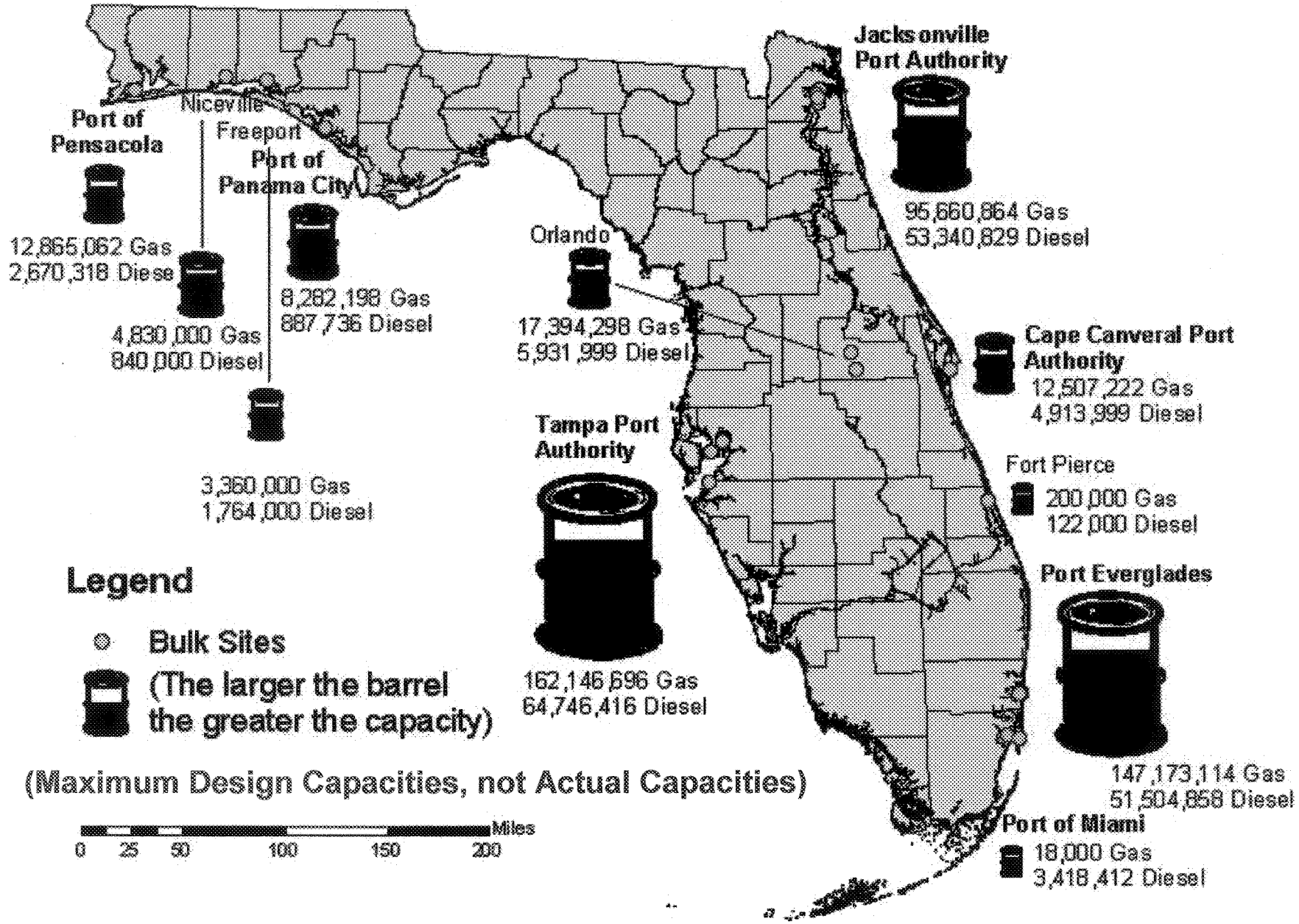
Field-Erected ASTs Causes from All Sources



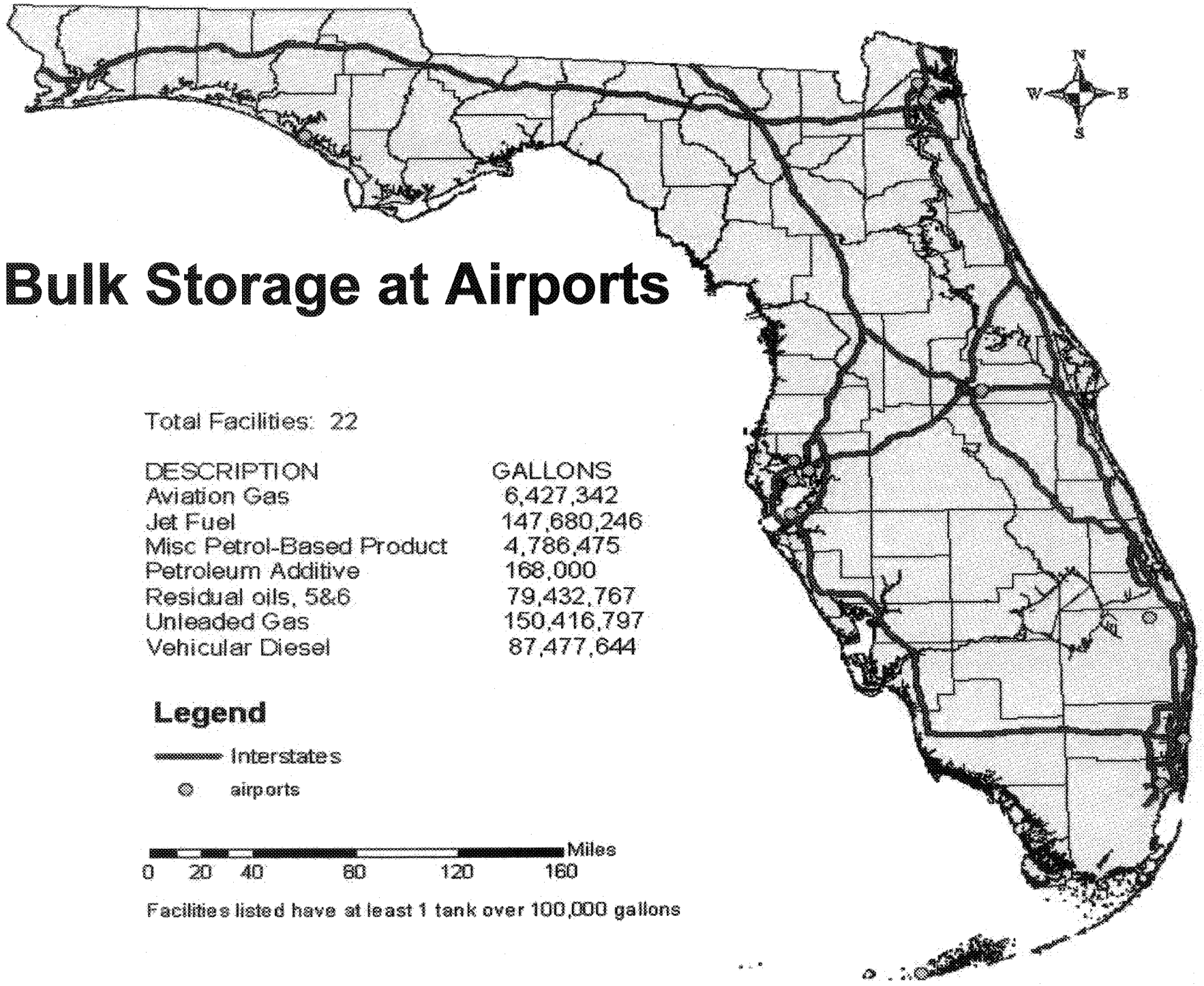
Gasoline and Diesel Distribution in Florida

- Florida receives 92-98% of its fuel supply by sea into 7 ports; 90% into three ports
- Supplied by domestic and international refineries

Bulk Storage Terminals at Major Ports – Gasoline & Diesel for Distribution to Consumers (ASTs >100,000 Gallons)



Bulk Storage at Airports



Total Facilities: 22

DESCRIPTION	GALLONS
Aviation Gas	6,427,342
Jet Fuel	147,680,246
Misc Petrol-Based Product	4,786,475
Petroleum Additive	168,000
Residual oils, 5&6	79,432,767
Unleaded Gas	150,416,797
Vehicular Diesel	87,477,644

Legend

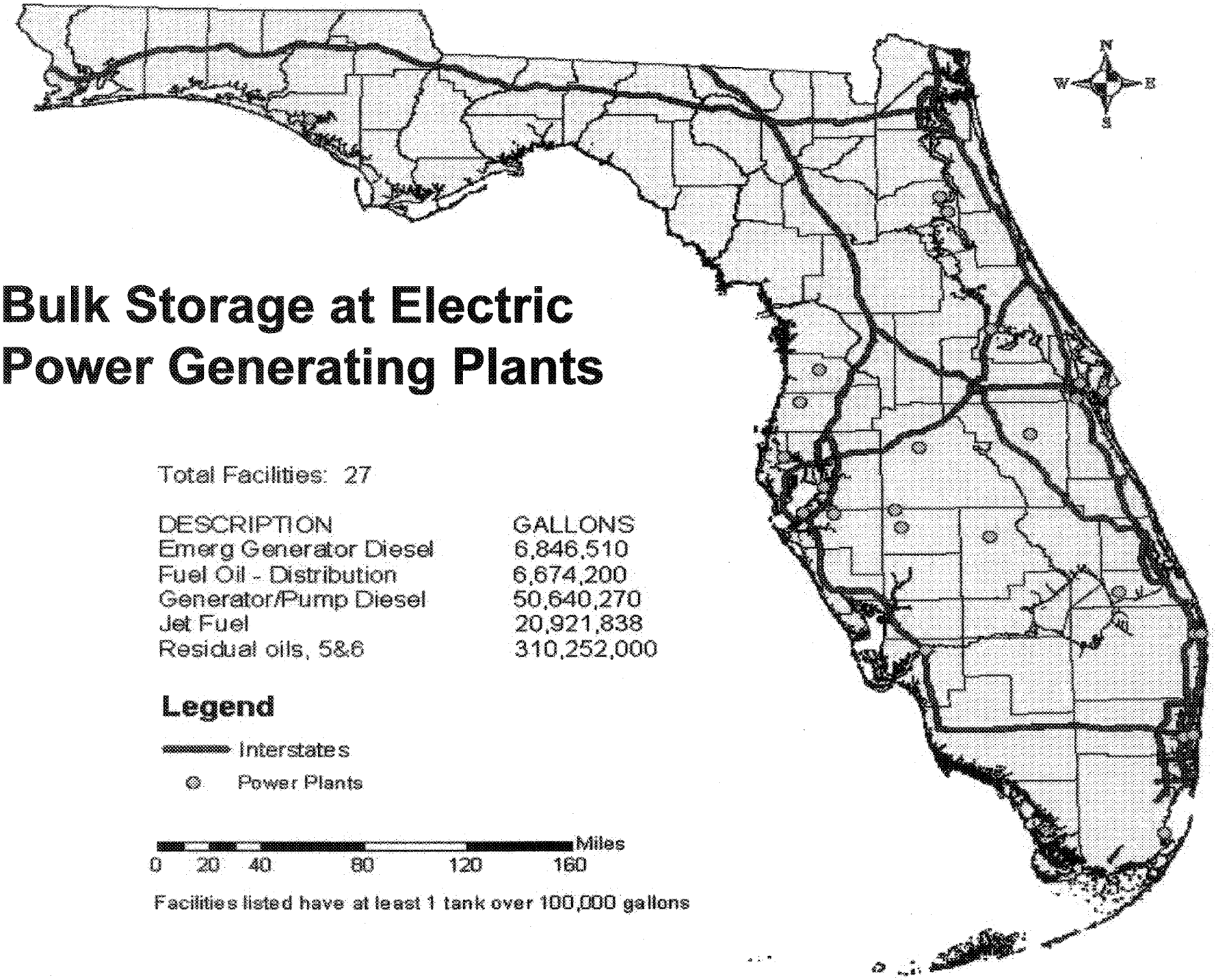
Interstates

airports

Miles

0 20 40 80 120 160

Facilities listed have at least 1 tank over 100,000 gallons



Bulk Storage at Electric Power Generating Plants

Total Facilities: 27

DESCRIPTION	GALLONS
Emerg Generator Diesel	6,846,510
Fuel Oil - Distribution	6,674,200
Generator/Pump Diesel	50,640,270
Jet Fuel	20,921,838
Residual oils, 5&6	310,252,000

Legend

Interstates

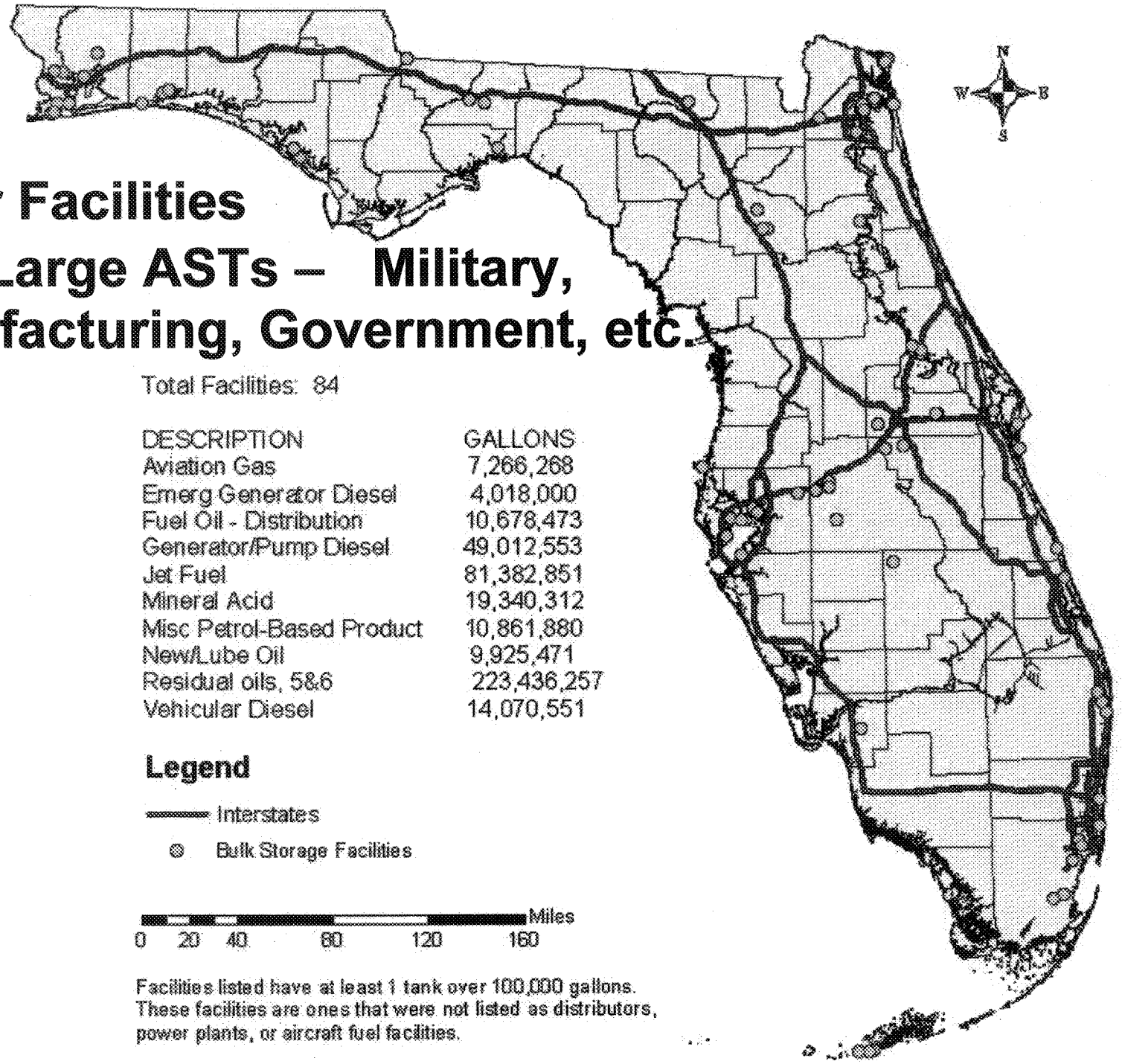
Power Plants

Miles

0 20 40 80 120 160

Facilities listed have at least 1 tank over 100,000 gallons

Other Facilities with Large ASTs – Military, Manufacturing, Government, etc.



Total Facilities: 84

DESCRIPTION	GALLONS
Aviation Gas	7,266,268
Emerg Generator Diesel	4,018,000
Fuel Oil - Distribution	10,678,473
Generator/Pump Diesel	49,012,553
Jet Fuel	81,382,851
Mineral Acid	19,340,312
Misc Petrol-Based Product	10,861,880
New/Lube Oil	9,925,471
Residual oils, 5&6	223,436,257
Vehicular Diesel	14,070,551

Legend

Interstates

Bulk Storage Facilities

Miles

0 20 40 80 120 160

Facilities listed have at least 1 tank over 100,000 gallons. These facilities are ones that were not listed as distributors, power plants, or aircraft fuel facilities.

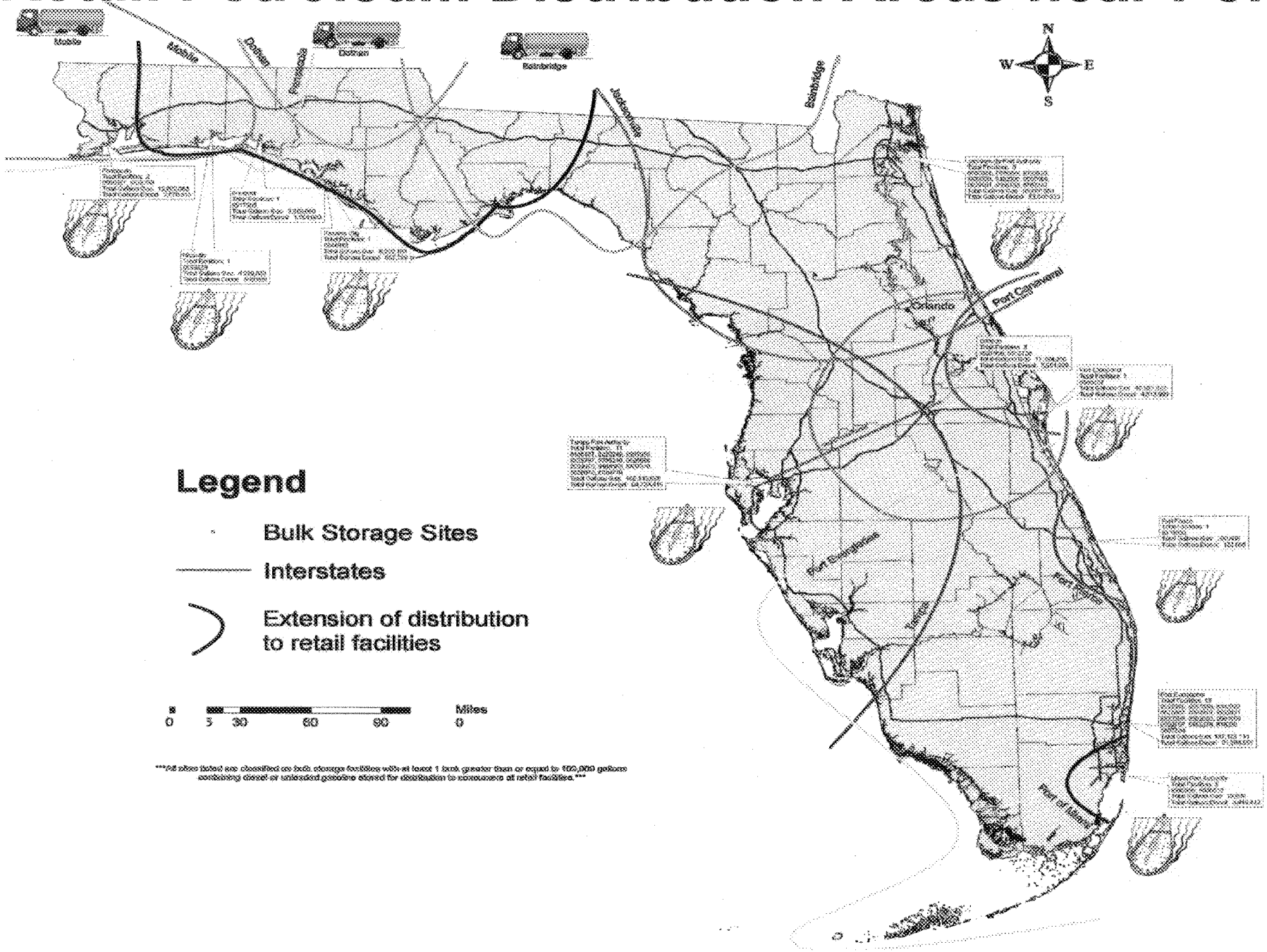
Barge unloading liquid petroleum at Port Everglades Dock

Bulk Product Storage Terminal Facility in Port Everglades

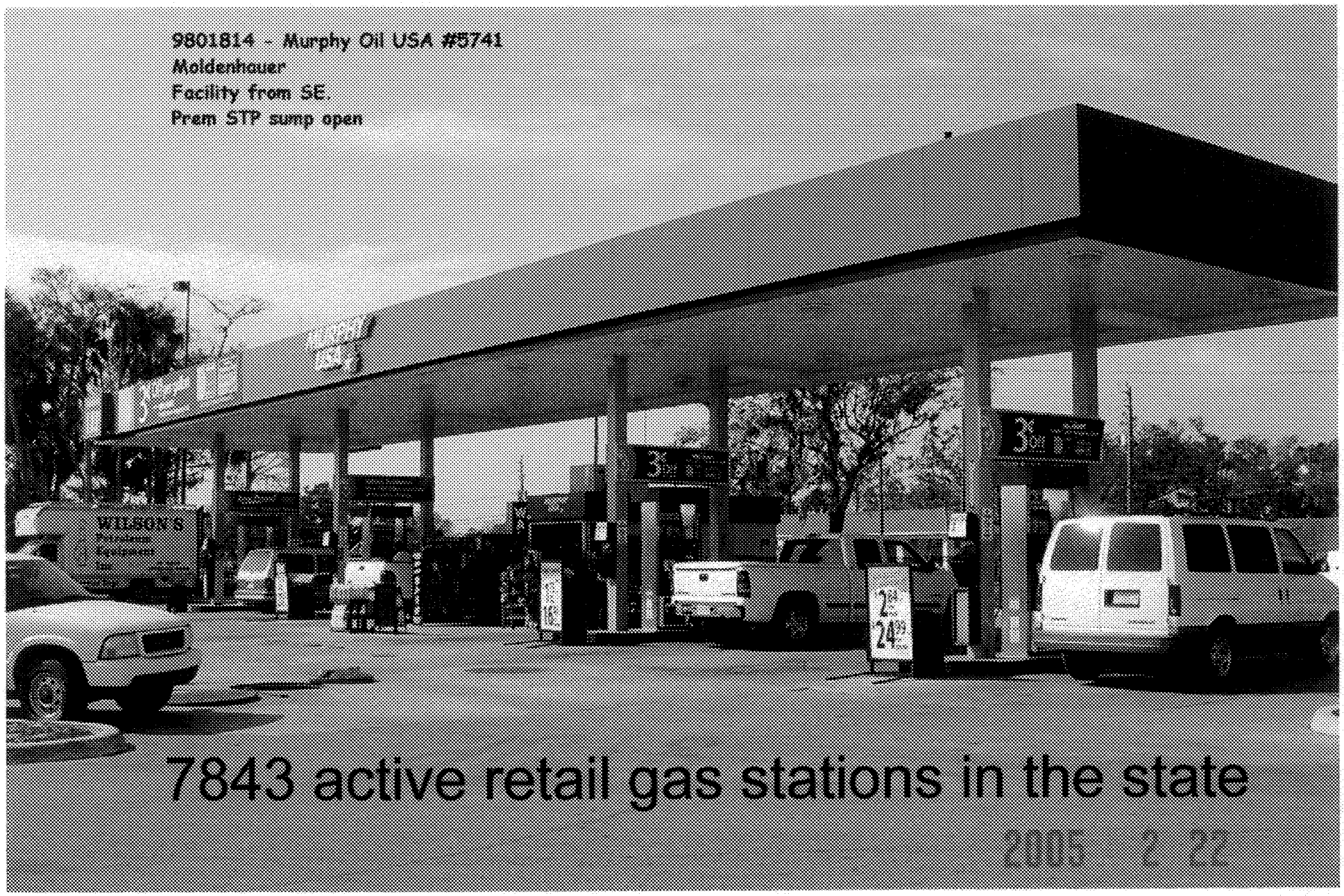
Loading rack for filling tanker trucks at Bulk Storage Facility

Tanker truck filling underground tanks at a retail facility

Retail Petroleum Distribution Areas near Ports

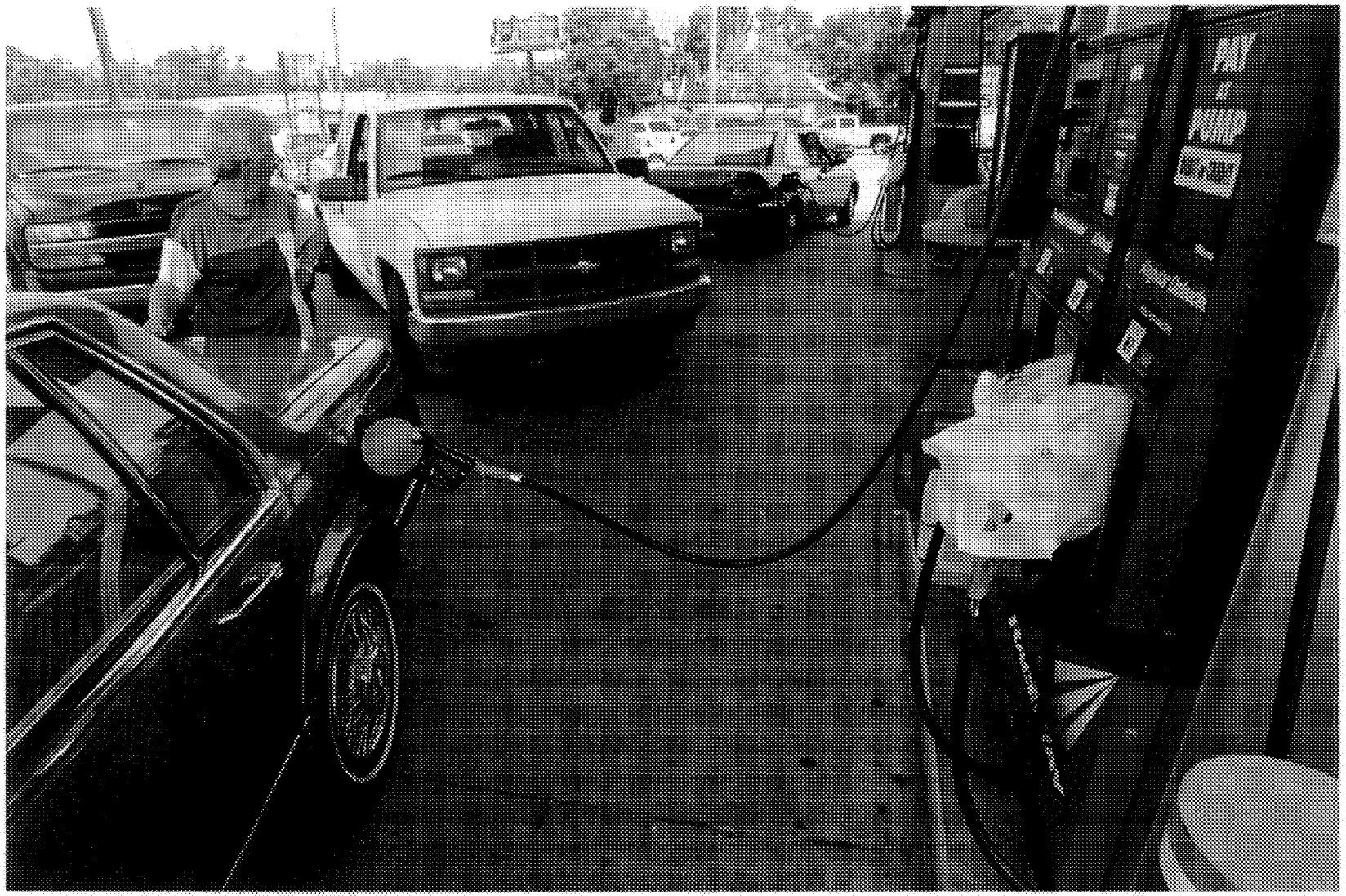


Consumers filling personal vehicles at retail outlet



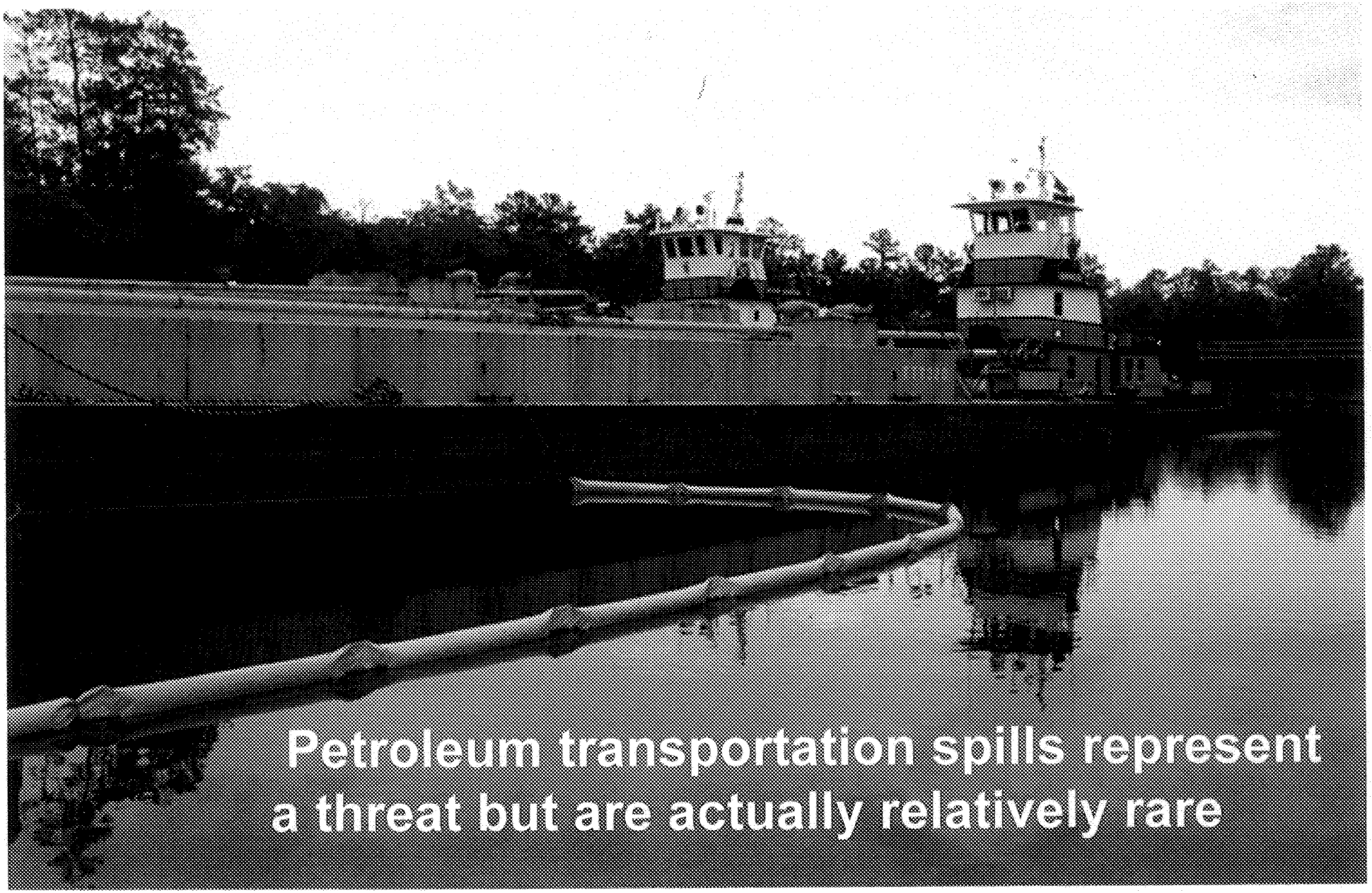
7843 active retail gas stations in the state

2005 2 22



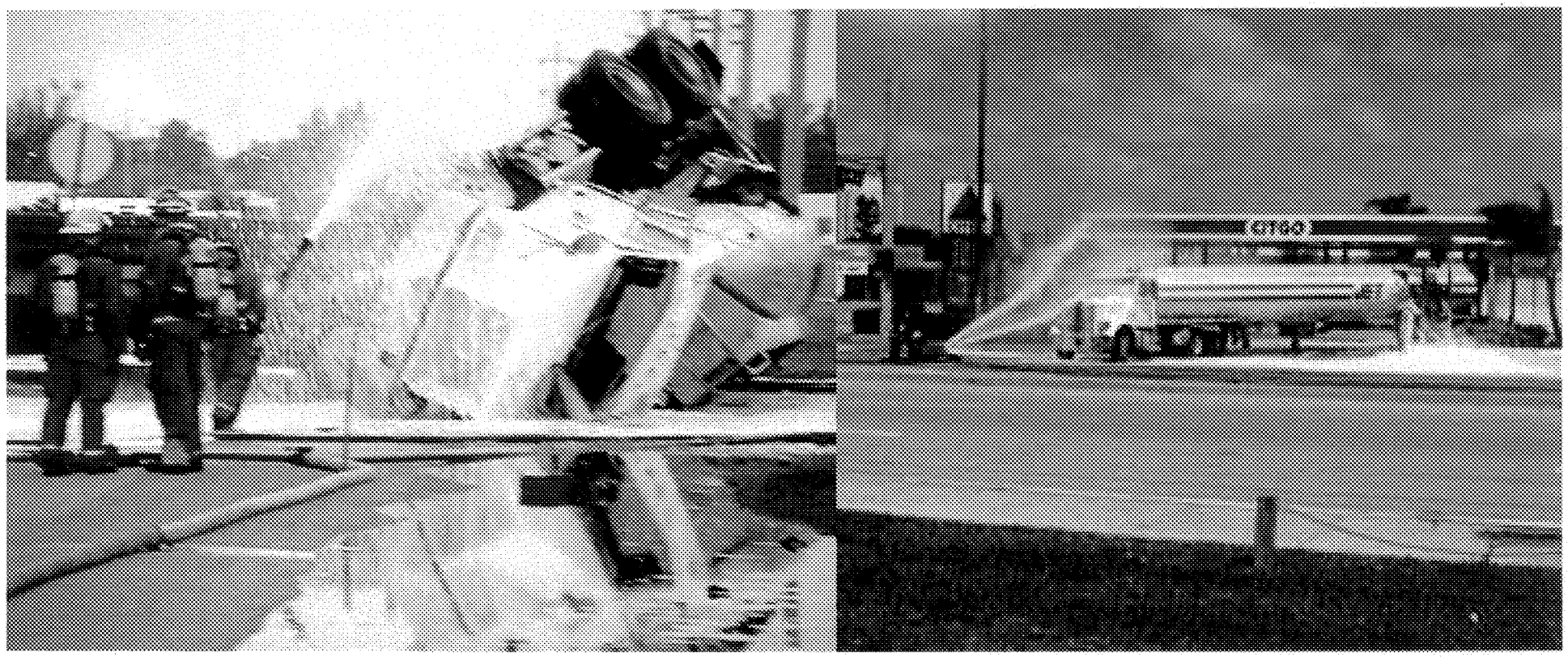
Under “normal” conditions, Florida consumes 8.6 billion gallons each year (24 MGD). Consumption is growing by 300 MGY.

Incidents Involving Petroleum Transportation

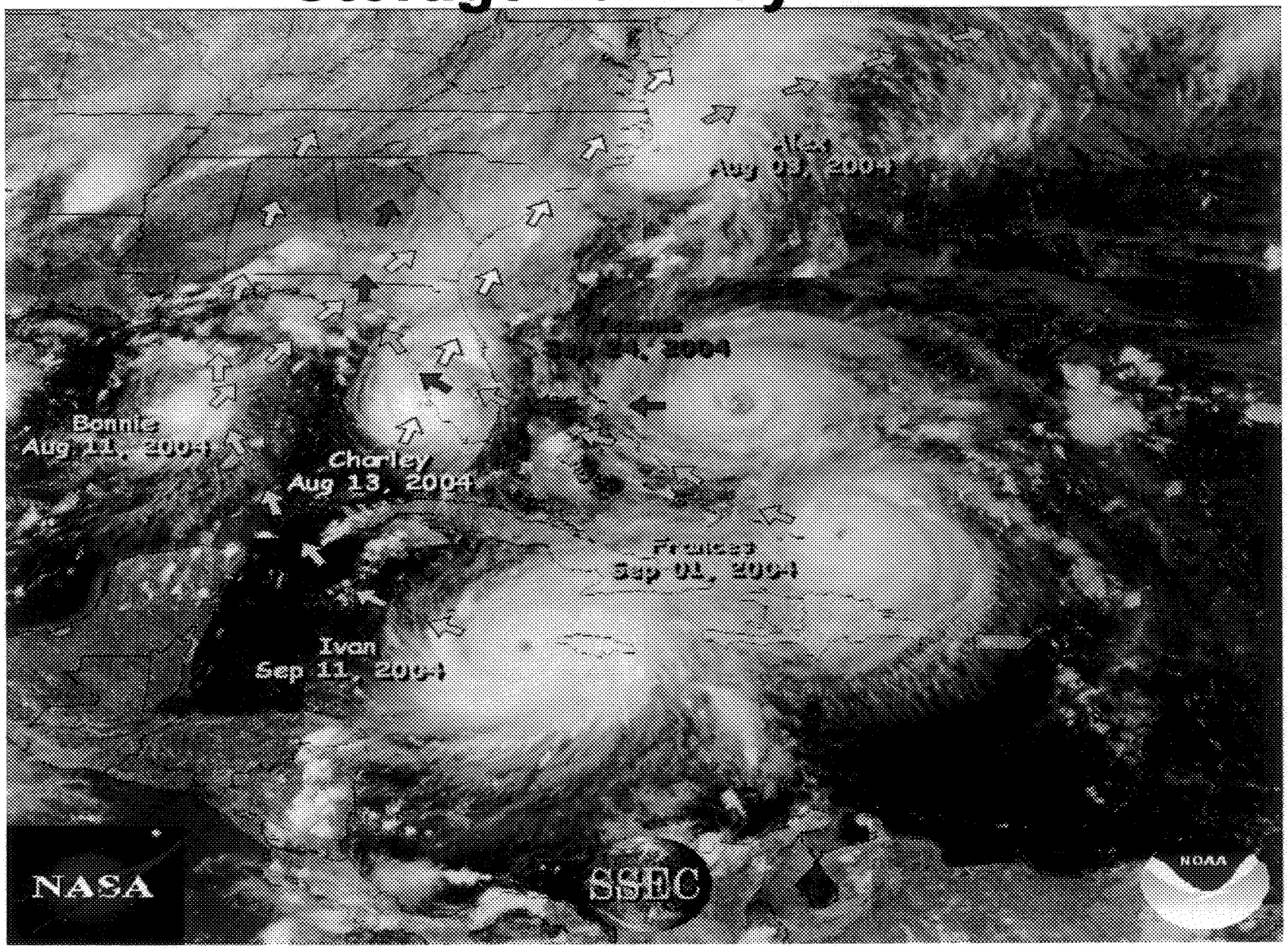


During calendar years 2003 and 2004 DEP Emergency Response personnel responded to a total of 1,005 coastal oil and hazardous material incidents and only 11 involved tank ships or tank barges carrying petroleum products (just over 1% of the incidents)

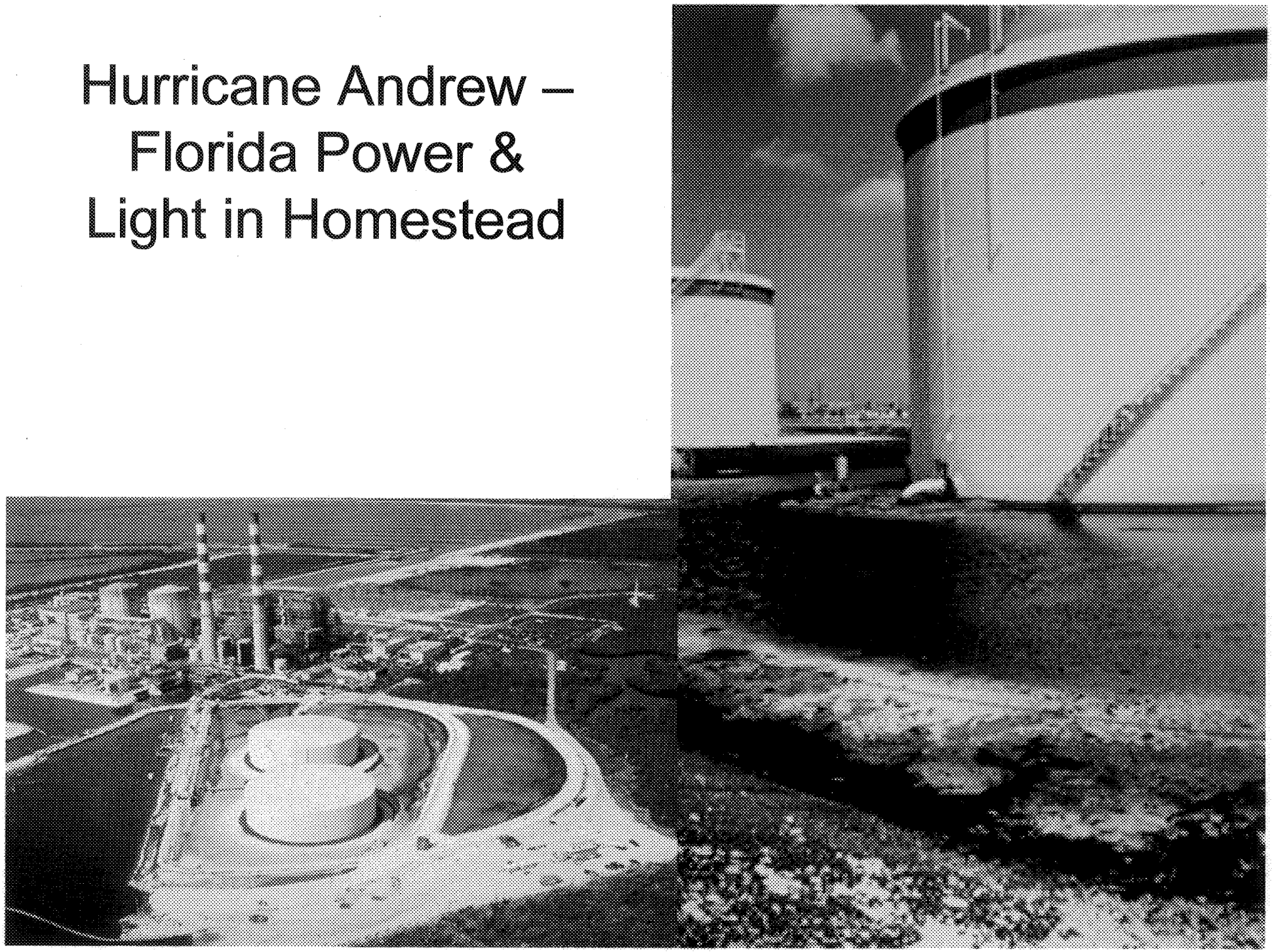
During the same period DEP Emergency Response personnel responded to a total of 3,094 inland oil and hazardous material incidents and only an estimated 65 involved tank trucks carrying petroleum products (just over 2% of the incidents)



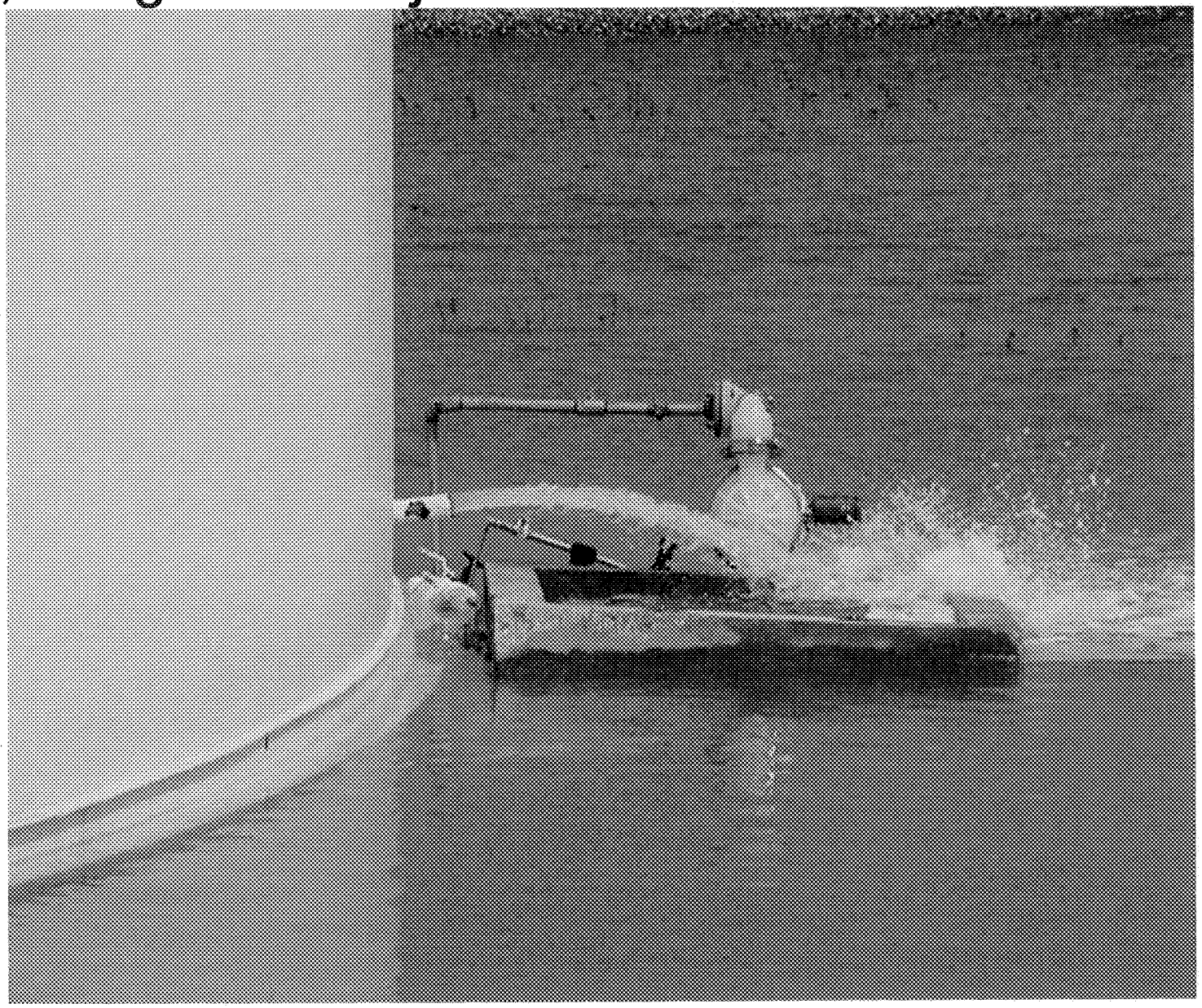
Hurricanes and their Effects on Aboveground Storage Tank Systems



Hurricane Andrew – Florida Power & Light in Homestead



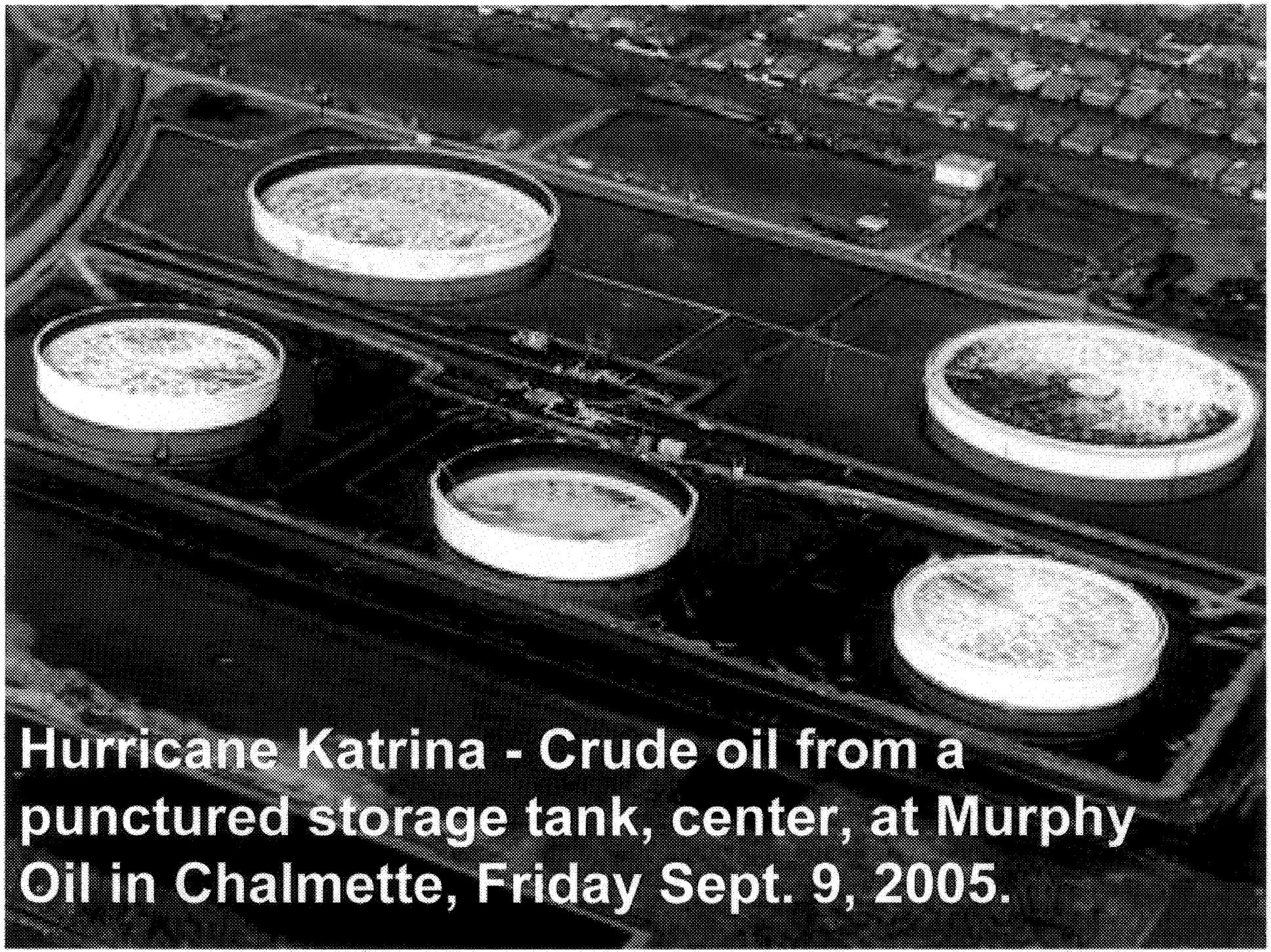
Hurricane Jeanne - Pratt & Whitney Facility – Loss of 150,000 gallons of jet fuel into the lined dikefield.



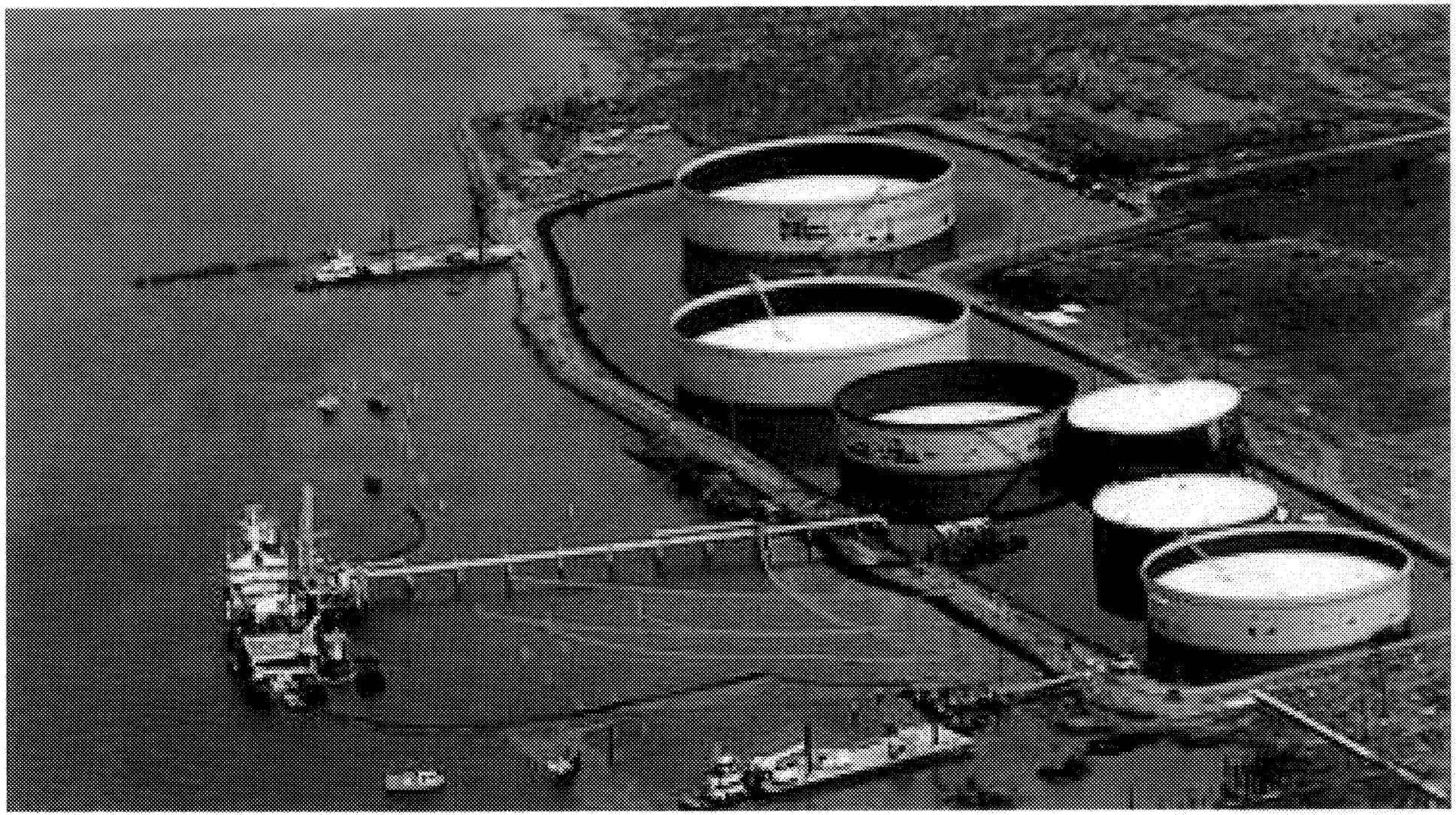
Hurricane Ivan- Williams Seafood Company in Pensacola

Overhead view of J.H. Williams Facility in Pensacola


Hurricane Katrina



Hurricane Katrina - Crude oil from a punctured storage tank, center, at Murphy Oil in Chalmette, Friday Sept. 9, 2005.



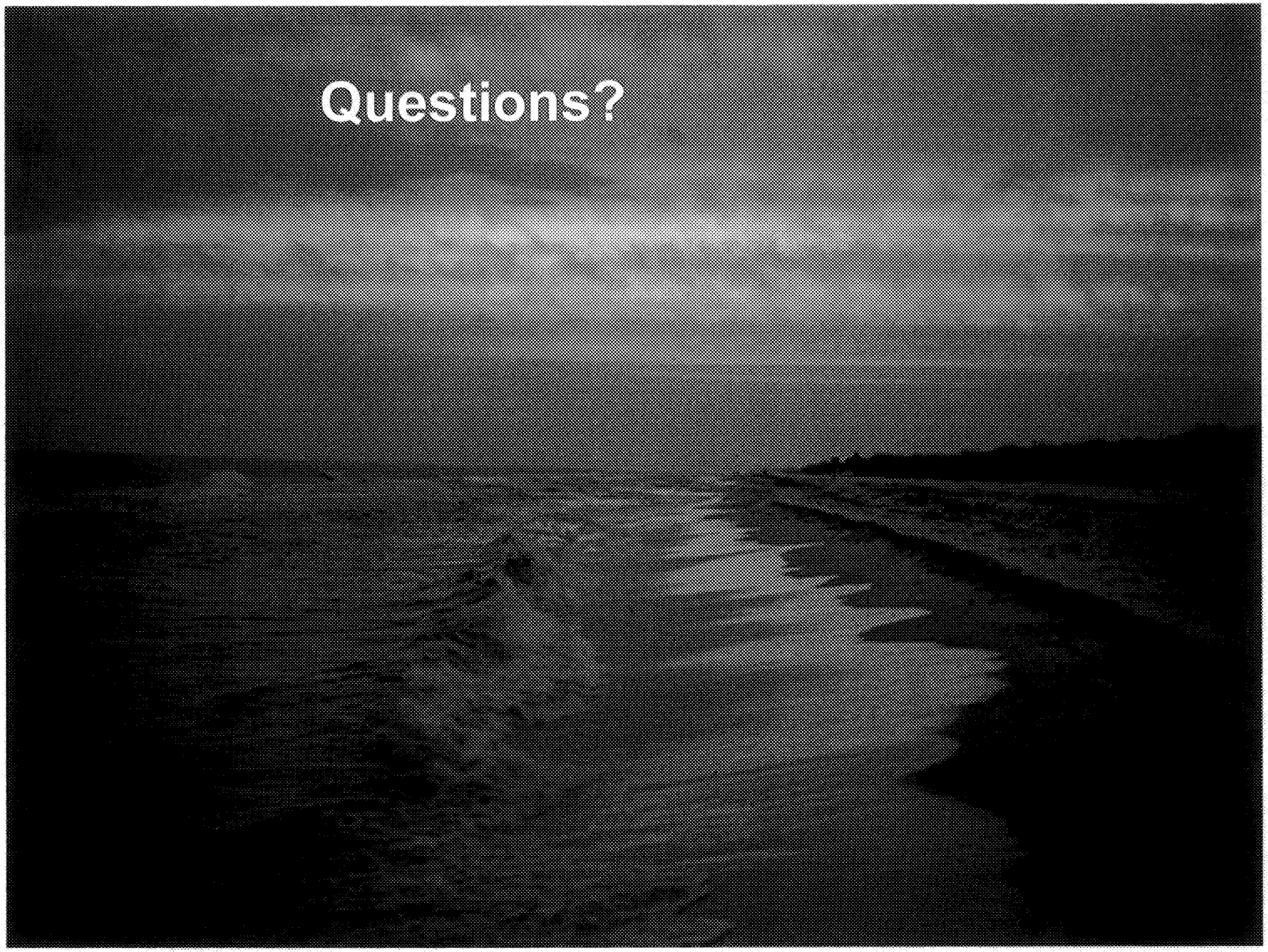
Crews work to pump crude oil out of a containment tank after floating tanks collided and leaked crude during the storm surge of Hurricane Katrina, Saturday, Sept. 10, 2005, in Plaquemines Parish, La.

Munro Terminal Biloxi

Munro Terminal Biloxi

Aerial Damage Assessment of Port Everglades

Hurricane Wilma


Questions?